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PRACTICAL NOTES ON THE DIAGNOSIS AND TREATMENT OF ULCERS.

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Of the greatest importance is the classification of ulcers into such as owe their origin entirely, or at least essentially, to local causes—local idiopathic ulcers, and such as spring from inner constitutional causes—constitutional, dyscrasic, symptomatic ulcers. Those ulcers most frequently met with in general practice are the ones which will occupy attention in this article. They are: scrofulous, syphilitic and scorbutic.

Scrofulous Ulcers.—These originate, in the great majority of cases, in the direction from within out, notably from suppurating lymph glands and from bones in a state of chronic inflammation or ulceration; again, from cold abscesses that have broken outwardly; in some cases also from superficial pustules, generally in childhood; they get better in autumn and worse in spring; recur frequently, even after an apparent perfect cure—this likewise mostly in the spring. Their ground is pale and unclean, their borders lax, quite ordinarily undermined (sinuous ulcers) more especially in such as go out from lymph-glands or bones; the surrounding parts are livid, the secretion thin-flowing, mixed with cheesy flakes, often also cheesy in its entire consistency, in which case it is usually of tubercular character. Healing takes place very slowly, indeed, even with the best local and general treatment; cicatrization always begins only after the undermined borders have been removed, either by spontaneous necrosis or by the aid of art. The scar has a rayed and shining construction, and is therefore not unfrequently compared to the appearance of frost upon a window pane. This depends materially upon its long development and the greatness of the loss of substance, but not upon the specific influences of the scrofulous dyscrasia. The other characteristic appearances of habitus scrofulosus are always well marked in these cases.

Syphilitic Ulcers—Chancres.—These appear either as the direct local consequence of inoculation with syphilitic contagium, or as symptoms of the general affection caused by any manner of transmission of this contagium—lues syphilitica, constitutional syphilis. In the first case they are called primary, in the second, secondary ulcers. The primary syphilitic ulcers mostly locate themselves according to the infection, sometimes on the lips of the mouth, usually on the genitals, and under three essentially different forms, to wit: simple, soft chancre; indurated, infectious chancre and phagedænic chancre.

The simple, soft chancre has a round form, an even ground, a sharp-cut border, as if made with a punch, rolled a little outward and slightly undermined; the secretion is unproportionately rich, thick, of a whitish yellow or yellowish green color, and in the highest degree infectious. The surroundings and the ground of the ulcer remain in the normal state of tissue and are, as a rule, free from induration. Nevertheless, cases do happen, in which, partly after the exhibition of medicines, partly also without them, a hardening in the ground of the ulcer takes place,

which we designate as inflammatory, and which, in point of fact, does not differ from other processes of inflammatory induration. Soft chancres are found several together on the same individual oftener than one single one, as they either appear at once, three or four in number, or increase gradually by local infection from one original ulcer. Swelling of the lymphatic glands belonging to the diseased side, mostly the inguinal glands (buboes in strict sense) can sooner or later complicate soft chancre, but are much more frequently absent. When they do come, they remain almost always upon the diseased side of the body, are limited to the superficial glands, and can as easily end in discussion as in suppuration. In the latter case, after the glandular abscess has broken, simple cicatrization or ulceration follows. Cicatrization may then be expected when the abscess had its seat, not in the gland itself, but in the peri-glandular connective tissue. If ulceration of a bubo occurs the secretion is again contagious. Inoculations with the pus of such a bubo or of a soft chancre have always brought about the development of a soft chancre, even when made a thousand times on the same individual. Whenever the inoculation is repeated a soft chancre always comes again, immediately, and without a period of incubation. On the soon reddened point of inoculation, and within the first twenty four hours, an inflammatory speck is developed, on the summit of which a small pustule filled with water, clear liquid, is formed by pushing up the epidermis.

Its contents become gradually turbid, until the third day, when it already attains the size of a pea, and sinks like a navel in the middle. Often this itching pustule is intentionally disturbed or destroyed by chance, in scratching; otherwise it finally bursts and leaves, generally between the seventh and tenth days after inoculation, the ulcer that has developed underneath, with the above-mentioned characteristics. Seldomer the pus-like contents dry in, and a brown crust is formed, that sits fast upon the ulcer, without causing it otherwise to differ from the nature of soft chancres. In its further course the ulcer grows, retaining its round form, at times more at others less in the surface, and thus sometimes neighboring ulcers run together. In most cases the granulations going out from the ground of these ulcers are not idle; often such flesh papulæ grow up too rankly, so that an ulcus fungosum is developed, that can have pathological anatomical resemblance to broad condyloma. Generally, however, unless the ulcer assumes a phagedænic form, cicatrization follows within several weeks, and without surgical or medical interference. When this begins the secretion of the chancre sometimes ceases to be infectious: but often it retains its power of contagion until cicatrization is ended.

The indurated or infecting chancre is much rarer than the soft chancre, and appears, in most cases, one alone, in parts of the body suited to it. Its form corresponds, as a rule, to that of the soft chancre; but the entire surface of the ulcer appears smooth, varnished like, the ground fatty, whitish-gray colored, and darkly pointed in the middle. The somewhat erect borders are not undermined, the secretion is much more sparse, and much more like good pus than in the first kind of syphilitic ulcers. In accordance with the name, the ground and surrounding of an indurated chancre exhibit a remarkable cartilaginous hardness, which mostly extends to a considerable depth, seldom remains confined to the superficial layers, and still seldomer surrounds the ulcer in a circle. This induration is distinguished from the before mentioned inflammatory one by the absence of redness and pain; on the other hand, it is customary to find diminished sensibility in the hardened parts. In the corresponding lymph glands is regularly developed, within the first fourteen days after the appearance of the chancre, a painless, above all not inflammatory swelling, and therefore, in the beginning, always without participation of the peri glandular tissue, from which, mostly after some time, the analogous glands of the other side are also affected, even though less severely. These so-called indolent buboes form very nodulated tumors, corresponding in quantity to the number of the diseased glands. They last, as a rule, much longer than the chancre that produced them. By direct attack, and by great exertion, inflammation, and then suppuration, with consecutive breaking out, can be brought about in them.

In scrofulous subjects this happens very easily and often without any apparent cause. Inoculation with the pus of an indurated chancre or from the bubo depending upon it, on the same body, which is already or was affected by ulcers of this kind, is never followed by any result. If this transmission, on the other hand, takes place for the first time, either intentionally or by accident, the secretion of the indurated chancre proves to be decidedly contagious. After an incubation period, of from two to six weeks, a pimple-like knot appears, which soon begins to ulcerate from the middle to the circumference, and without much pain, at times quite unnoticed, changes into the character-

istic ulcer. The further course until the, also in this case possible, cicatrization of the ulcer without the aid of medicine or surgery, lasts from four to six weeks; this takes place, at first, by the shooting out of good granulations from the border, and goes on generally in centripetal direction, seldom equally over the whole surface. Exceptionally the growing ulcer-granulations change into broad condyloma. The induration remains, as a rule, after cicatrization, sometimes only a few weeks, sometimes for years, and then gradually disappears. If the chancre had its seat in the outer skin, the scar then retains often still longer a characteristic, dark color, that is never observed after a soft chancre. The distinction between these two different kinds of syphilitic ulcers, after the above given description, will present no especial difficulties. It is, however, essential and necessary, because in soft chancre it is a question of a malady that very seldom, perhaps never, is followed by disease of the rest of the body; whereas, constitutional syphilis not only follows with great certainty an indurated chancre, but also appears already during the incubation period of the ulcer to develop itself with it, so that we may, with more right, regard the induration as first symptom of the general affection than the direct effect of local transmission.

Phagedænic chancre is such an one as appears with gangrenous disturbance spread widely around it. Phagedænic chancre presents in a wide surrounding inflammatory and œdematous swelling, its ulcerous grounds showing a resemblance to the diphtheritic coating that is seen in hospital gangrene. This character, which in every respect offers analogies to nosocomial gangrene, is ordinarily first assumed after the chancre has existed already for some time, much oftener in soft than in indurated ulcers, and is to be regarded as a complication, which it is true must be especially described, but by no means justifies us in designating it as a distinct species. All that will be said with reference to the contagiousness of the secretion, the rarity of a general affection, the kind of buboes, and so forth, in speaking of phagedænic chancres, finds its explanation in the fact that most soft chancres are subject to this complication. The at times more ulcerous, at others more gangrenous disturbance—the latter also designated as gangrenous chancre—spreads itself more along the surface than in the depths, quickest in connective tissue, next to that in the skin, with less facility in other tissues.

The shape of the ulcer is usually irregular and serrated, the border sinuous, often widely undermined. Healing of this extended disturbance takes place the more slowly because mostly weakened or otherwise diseased individuals are subject to this complication.

Secondary syphilitic ulcers develop themselves on different parts of the body; at times on the mucous membranes, at others on the outer skin. In the first case the mucous membranes of the palate and pharynx are the seat usually preferred. On the outer skin appear the most forms of syphilitic exanthema, the so-called syphiloids, now pustules—ecthyma, then blisters—pemphigus, rupia; again tubercles, etc. Or there are buboes that have broken out, or syphilitic gummy tumors, finally inflamed bones and caries. The last two symptoms may more properly be designated as tertiary ulcers, as it is customary to regard the local diseases out of which they spring as a tertiary condition. With more probability is the indurated chancre already classed by us in the primary ulcers, certainly, at least, its characteristic induration, to be regarded as *secondary*; that is, as a breaking out of the already developed general disease. As manifold as the forms of syphilitic exanthema, are also those of secondary ulcers; nevertheless, the serpiginous type seems to be more generally selected. But it is utterly impossible out of the form and appearance alone, to determine with certainty the syphilitic nature of such an ulcer; on the contrary, the history of the ulcer itself, and the condition of the whole surface of the patient's body, especially the presence of any eruption, the continuance of induration on places of first infection, the swelling of the lymph glands, and finally, the anamnesis in its widest sense, must aid us in fixing a diagnosis. Perfect certainty is often arrived at only *ex purantibus et nocentibus.*

Scorbutic ulcers are caused by reason of faulty nature of food generally, favored by long exposure at the same time to moist air. These are the results of a general disease, being brought out directly by effusions of blood in and under the skin, with lively pains, on the thigh, the external and internal gums. Their ground is nodulated, unclean, usually of a bluish-red color, as the tissues, becoming necrotic, are infiltrated with half coagulated blood. The border is loose, and, like the surrounding of the ulcer, often œdematous and filled up with blood; sometimes loose, easily bleeding granulations grow up out of it. The secretion is very thin, mostly tinged with blood, and of a disagreeable, sweetish odor; the remaining scars are livid and shining.

Lupus.—The ulcerative form of lupus is more common than the exfoliative or serpiginous. After the primary appearances (pustules, small knots or spots) have existed for some time, they multiply, either with inflammatory symptoms, or the diseased skin or mucous membrane becomes covered with a diffuse redness, swells also by œdema, and here and there the thin epithelial layer is broken through. The, at first, small, round, very little or not at all painful ulcers spread themselves, either in breadth or depth, run into each other from all sides, and then get irregular, serrated borders. They become covered with brown, fast adhering crusts, under which a yellowish, thick, or brownish, thin mass is continually forming. If these crusts, which are generally dried fast on and in layers one above the other, be removed, bleeding easily follows from where they sat, from the hyperæmic, weeping borders of the ulcer. The crusts always gain in thickness as the depth of the ulceration increases, until, as for instance on the nose, not only the skin and muscles, but also the cartilage and bones are attacked. The superficial lupus, as also the deeper, can cicatrize spontaneously, by diminution of the hyperæmic tendency. The scars are the scars of gangrene; white, more or less elevated, folded strings, with great inclination to shortening. Often they break out afresh, when the pustules or knots in the periphery ulcerate. From many sides, and with right, the resemblance of lupus to syphilitic disease is dwelt upon. With lupus there is very frequently scrofulous diathesis. According to Cazeneuve, the small knots and tubercles that form under the influence of a syphilitic dyscrasia are more voluminous, rounded, and have the above-mentioned dark (copper-red) color; they are not, like those of lupus, covered with whitish epidermic scales, continually pushing each other off. The syphilitic tubercle usually is found in older individuals; on the other hand, lupus selects childhood and youth. Ulcerating, syphilitic tubercles have swollen, reddened, zigzag borders. They spread in depth or on the sides, in sinuous pockets, and cause, in course of ulceration, fistulous passages under the skin; while the ulceration of lupus always begins on the surface, and with this, makes its appearance much earlier than that of syphilitic tubercle. The neighboring bones, *e. g.*, the inferior maxillary, ossa nasalia, are, in lupus, only laid bare, so that they may be seen in the ground of the ulcer, without apparent change, while syphilitic ulceration attacks them. Beyond these, the other pathological conditions of the body caused by syphilis offer always distinguishing features. In many cases the distinction is possible from these alone.

Treatment of Ulcers.—If the ulcer rests upon a dyscrasia, this must be removed. Undoubtedly the therapy of dyscrasia belongs essentially to the field of inner medicine. Therefore, in this place it will only be regarded in so far as it may have reference, in helcology, to the most salient dyscrasic affections—scrofula, syphilis and scurvy. The most important point in the treatment of scrofula is to procure for the patient easily digestible, nourishing food, and to keep him in pure, warm air. Only when these conditions can be fulfilled is help to be afterwards expected from the untold number of drugs recommended. Among these the most seem to have for their only object an increase of the general nourishing. In this view is recommended in very large quantities and only in very large quantities continued for some time, cod-liver oil, phosphate of lime, preparations of iron, and the so-called bitter medicines, which last, perhaps, only work by increasing or regulating the appetite.

From another list of medicines is expected a specific change in the general process of nutrition. Here belong, particularly, the preparations of iodine, antimonials, salt baths, whose percentage of iodine and bromine is also brought into consideration. While the pharmaceutical preparations of iodine and antimony are followed by doubtful results, in so far as they are not confined to very small doses, and are used even not without danger; there is only one voice as regards salt baths (natural and artificial). Undoubtedly their greatest efficacy consists principally in enlivening the skin. Frequent baths in general, with good diet, should be ordered.

In the treatment of syphilitic ulcers we must start on the hypothesis that, through every primary ulcer, perhaps, a general infection will follow; the removal, then, at the earliest possible moment, of the infecting ulcer (chancre) is strongly urged as a prophylactic measure against constitutional disease. The newly grown or still developing primary chancre must be thoroughly cauterized. The choice of caustics is not, indeed, of so much consequence as is claimed by many authors; and yet caustic potash, Vienna paste and chloride of zinc, on account of their fundamental workings, are preferable to nitrate of silver (lapis). This prophylactic cauterization must appear foolish to those who hold it proven that soft chancres have never secondary consequences, and are only a harmless local affection; and that the incurated chancre already belongs to

secondary syphilis. In the first instance, cauterization would be of no use; in the last, alike useless, because "too late." But as long as the correctness of this opinion, held by us also as highly probable, remains doubtful, it is the duty of the practitioner to advise cauterization for all fresh chancres. And even if in hard chancre it is never possible to entirely destroy the poisonous, infectious matter, in loco, before its reception into the circulation, juices and tissue, it is, nevertheless, probable that its intensity may be modified by cauterization. However, an anti-dyscrasic treatment is indicated upon the appearance of induration, which need not necessarily be carried out in soft chancres, unless secondary symptoms show themselves. In phagedænic chancre the mercurial treatment was formerly warned against, as physicians thought it necessary to commence an anti-dyscrasic therapy in all cases of chancre, on the ground that the destruction of tissue was thereby hastened. As phagedænic chancres are almost always soft, reason for such a treatment seldom exists. Bardeleben* has never (after an extended experience) seen such injurious results from the internal employment of sublimate; and states further, "according to the analogy, the contrary should be expected, as sublimate, administered internally, in hospital gangrene, is recommended by the best authorities, as v. Pitha." The local treatment of phagedænic chancre forms part of that of hospital gangrene, while the ordinary chancre is treated essentially as an asthenic ulcer.

(To be Continued.)

* *Chirurgie und Operationslehre.* Berlin.

SICK HEADACHE; ITS CAUSE, HYPERMETROPIA AND ASTIGMATISM, EITHER ALONE OR COMBINED, AND ITS CURE, A PROPERLY FITTED GLASS.

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In this article I propose to make known to the medical profession my discovery of the real cause and the successful treatment of sick head ache, that opprobrium of medical art from the beginning down to the present time. I shall give the circumstance that led me to the discovery, and shall offer arguments to convince others of the correctness of my conclusions.

One has said: "Headache destroys much of the happiness and cheerfulness of life, and reduces many a highly gifted and poetical soul to the level of a discontented drudge." This language is doubly applicable to sick headache, that dreadful disease which makes youth look forward to old age with a feeling of delight, and long for its approach, when, as he has been told, his malady will disappear.

I, for years, had been a sufferer from sick headache, and after becoming a member of the medical profession, sought from all sources a cure for my malady, but found none. I believed the teaching of authors as to the cause of the disease, viz., stomachal trouble, and took almost every remedy recommended, but continued to have attacks of greater or less severity every month, frequently twice a month. Finally I gave myself over to what I considered my unalterable fate, and thought of nothing as a cure for my disease but old age, and consequently, when suffering, would almost have a secret longing to be old, that I might be free. I had often wondered why it was that old age gave immunity, and turned in vain to authorities to find a satisfactory reason.

The Circumstances Leading to my Discovery.—My mother, from whom I supposed I had inherited my predisposition to sick headache, was a great sufferer from the same malady. I had seen her confined to her bed, frequently as long as three days, suffering almost as much as mortal could bear. She lived and suffered until age gave her ease. From 45 to 50 her attacks were less frequent and not so severe. She has had but few attacks since 50, and now, at the age of 58 years, she is entirely free from attacks, and has been so for several years.

During the last few years she has noticed that she cannot distinguish persons or things at a distance, as she once could, but she supposed that this was one of the natural consequences of age. She did not think about her freedom from sick headache having been purchased at the sacrifice of perfect distant vision.

In January of this year (1882) she visited me and spoke of the failure of her vision for distant objects. (Long ago she had commenced the use of glasses to correct her presbyopia). Hoping that I might be able to make her see better, I asked her to go into my office with me, where I could test her vision. I found the vision of her right equal to $\frac{20}{0}$, *i. e.*, at a distance of twenty feet from the card she could see only letters that a perfect eye could see at a distance of one hundred feet; while vision for left eye was equal to $\frac{20}{\text{lxx}}$. Her once latent hypermetropia had been converted, by loss of power in her ciliary muscle, into a wholly manifest hypermetropia, no astigmatism existing in her case. A spherical convex glass

of 24 inches focal distance gave her perfect vision in right eye, and a similar glass of 36 inches focal distance gave perfect vision in left eye. On questioning her a little the thought entered my mind, could not her far-sightedness have been the predisposing cause of her sick headache, and would not the simple glasses I now give her, if they had been given her in early life, have transformed her years of suffering into years of ease? This thought dominated me, and I went about the inquiry in earnest.

The books all say that age gives immunity; and knowing that age always converts a latent into a manifest hypermetropia, I at once sought out other old persons who from youth to age had been sufferers from sick headache, that I might see if they too were hypermetropes. I failed to find one who did not have manifest hypermetropia, and whose bad sight for distant objects did not come on as the sick headache disappeared.

The doctors with whom I have talked all say they do not know an instance in which sick headache did not give way between the forty-fifth and sixtieth years of age, but they can make no statement as to vision, whether it was good or bad.

In the meantime I continued to suffer. During January, February, and March, of the present year, I had a number of attacks of sick headache, perhaps as many as six. I know they were very frequent, and occasionally very severe. The more I used my eyes in reading and writing, the worse were my attacks. My investigations had led me to believe that hypermetropia is the cause of most, if not all, cases of sick headache (that form continuing through life, regardless of old age, if sick headache at all, must be due to some other cause), and I was only waiting for time to test my opinion, in my own case. In the latter part of March, of the present year, the premonitory symptoms of an attack of sick headache warned me of the ordeal through which I must soon pass, unless something could be done to avert it. I did not take the accustomed dose of chloride of sodium, which always gave me as much relief as anything I had ever taken; but had three or four drops of a one per cent. solution of atropia put in my left eye, the one always hurting me throughout an attack, my headache and eye-ache being confined to the left side. In half an hour my ciliary muscle was at rest, and I was perfectly free from pain and had no inclination to vomit, whereas, if the atropia had not been put in my eye, by the end of the same half-hour my headache would have been almost unbearable, and great nausea and vomiting would have attended, all to last and make me most miserable for several hours. I was most happy with the change I had experienced, and felt like crying out, "*Eureka!*" What gave me relief? The atropia had relieved the tension of the ciliary muscle, putting it at rest, and thus relieving its pain; and, there being no further cause for sympathy on the part of the head and stomach, the pain and nausea ceased. Although I had, apparently, perfect vision before the ciliary muscle was put at rest, I now found my vision equal to $\frac{20}{0}$, *i. e.*, I could see at a distance of twenty feet only letters that, before the atropia was used, when the ciliary muscle had its full power, I could have read at a distance of one hundred feet, and even these large letters seemed double. Now the condition of my ciliary muscle under atropia is just the condition natural and essential to a perfect (emmetropic) eye, when looking at distant objects, and yet the vision of an emmetropic eye would be equal to $\frac{20}{xx}$. Both hypermetropia and astigmatism existed in my eye, already at rest, for which I gave the full and proper correction. The glass correcting the defect and enabling me to see without straining, as well as a perfect eye can see, is a combination of a convex spherical of forty-two inches focal distance and a convex cylindrical of sixty inches focal distance, with its axis set at an angle of 95°. I afterwards found my right eye both hypermetropic and astigmatic, and gave it the proper correction. Since March I have been doing all my reading and writing with my glasses, with the exception of one week, and for laying them aside for only that short time, I paid dearly in suffering from a severe attack of sick headache. The reason for laying them aside was twofold, viz: 1st. I was using the heavy glasses and still heavier frames of my refracting case, which, on account of their weight, were uncomfortable; and 2d. I wanted to test their value by not using them. While wearing them I did not feel a single symptom of sick headache. When I put them off I continued reading and writing as when using them, but with inconvenience I had never felt before. I suffered so from the attack of sick headache caused by the disuse of my glasses I shall never repeat the folly in the future. I had a pair of spectacles made, and now wear them all the time, and feel that I am safe from attacks relief from which I had expected nothing but age to give me.

In my own case sick headache had its cause in hypermetropia and astigmatism, and its cure was glasses.

I have had but one other case by which I have been able to still further demonstrate the correctness of my views. That case is a married lady, twenty-six years of age, a sister of mine. She was not so great a sufferer as either our mother or myself, but her cure has been as perfect and remarkable as my own. She was hypermetropic in one eye, and both hypermetropic and astigmatic in the other eye. The proper glass for each eye was given her, and now her sick headache is a thing of the past.

Since writing the above, my preceptor, Dr. Crook, of Henderson, this State, came into my office, to whom I made known my views. He is one of the many sufferers from sick headache, and like all others, believed the predisposing cause some stomachal trouble. He said, "can hypermetropia be the cause in my case? I always thought I had perfect sight." I told him that, according to my theory, it was, and that I had no doubt but it was. I asked him to let me test his vision and see. We selected his right eye, that being the one he suffers more from. Before instilling the solution of atropia I determined, by means of a convex glass, that he was hypermetropic, though without the glass his vision was equal to $\frac{20}{xx}$, his hypermetropia being latent. Atropia converted his latent into a manifest hypermetropia, and now, instead of his vision being $\frac{20}{xx}$, it was not more than a perfect $\frac{20}{c}$. A spherical convex glass of twenty-four inches focal distance gave him perfect vision. He was surprised, but now believes, with me, that properly fitted glasses for both eyes will do for him what my glasses have done for me, cure his sick headache. This case is another link in the chain of evidence that will, when complete, convince all of the correctness of my views herein set forth.

This is the first of my making public my discovery, and, lest I might be too severely attacked by some one, I will produce some arguments to support my views.

Flint, in his work on Practice, says that the affection involves a constitutional predisposition, acting with which, various exciting causes may bring on an attack. He could not name the predisposing cause. He supposed that some toxical agent must exist in the blood, but says its source and nature are unknown. I claim that the predisposing cause is hypermetropia and astigmatism, either alone or combined, and that chief among the exciting causes is work requiring the convergence of the axes of the eyes with the attending action of the ciliary muscle, such work as reading, writing, sewing, crocheting, etc., which work, in an emmetropic eye, would produce no bad symptoms.

With Flint I agree that the predisposition, in most persons, ceases at the age of 50 or 60 years. While he gives no reason, to me there is a satisfactory reason, and it is the only one ever offered, so far as I know, it always having been considered an unexplainable fact. My explanation is that it is about the age of 50 or 60 years, in most persons who are hypermetropic, whether they suffer from sick headache or not, when a latent hypermetropia is converted into a manifest hypermetropia, the ciliary muscle that has had to work so hard during so many years being worn out and ceasing its labors. Long before this has presbyopia (old sight) come on, requiring the person to use spectacles when doing near work, as reading, etc. By this time the hypermetropia is manifest, while during the period through which he suffered, perhaps 30 years or more, the hypermetropia was latent, rendered so by the action of the ciliary muscle.

The periodicity of the attacks may be explained by the eye's being able to bear for a time the excessive work which it is made to do, when at length its distress is made known by an explosive attack of sick headache, the eye and head aching indescribably and the stomach, through sympathy, so desperately nauseated as to unload itself of its contents. Even before the attack comes on the stomach performs its functions sluggishly, through sympathy for the overworked eye. Cannot the stomach sympathize with the eye if the eye and head can sympathize with the stomach?

To Flint's next statement I am not ready to give my assent, viz., that the predisposition exists more frequently in females than in males. We may take one hundred females and one hundred males out of the same city, town or neighborhood, and I doubt if we find more hypermetropes (hypermetropia, according to my theory, being the predisposing cause) among the former than among the latter; but, at the same time, I believe that the number of females actually suffering from sick headache would be much greater than the number of males. Why? Perhaps seventy-five out of the one hundred females would have to employ many hours in the day in reading, sewing, crocheting, or some kind of work requiring near vision, with the necessary tension of the ciliary muscle, the one great exciting cause of sick headache; while not more than twenty-five of the one hundred men would be engaged in work requiring continuous near vision. Then, while I do not know that the pre-

disposing cause exists more frequently in females than in males, yet I believe that I am right in concluding that the former are more exposed than the latter to the one great exciting cause mentioned above.

The clinical history of sick headache given by Wood in his Practice, is unobjectionable. But when he says that the predisposition, for the most part, consists in debility of the stomach, and a peculiar state of the nervous system which renders the brain especially sensible to gastric irritation, I must dissent from, though I once embraced, the doctrine, and drugged myself accordingly. In most cases he thought the headache secondary to the stomach affection, the head sympathizing with the stomach; but says there is reason to believe that the reverse is sometimes the case, the head affection being primary, the stomach trouble secondary, the stomach in this case sympathizing with the head. Wood's views, as well as all others ever expressed, must be erroneous, if my doctrine is true.

Although sick headache is as common as it is dreadful, Bartholow and other writers on the Practice of Medicine have not said a word about it.

I will not attempt, in this communication, to explain the structure of the eye, to define hypermetropia and astigmatism, or to give the relationship existing between the eye and the stomach, so intimate that when the one is affected the other will sympathize, as in sick headache. Nor have I attempted to give a clinical history of the malady. In the REPORTER of May 6, 1882, you can read an admirably written clinical history by Dr. Smith, whose communication I read with interest. You will see from his communication, however, that we do not agree as to cause and treatment. If he will now send his male patient, aged 40 years, a history of whose case he gives in his communication, to an oculist, I promise him that the cause of the disease will be ascertained to be hypermetropia, either alone or combined with astigmatism, for which the positive cure will be glasses. Many others of his patients of whom he makes mention, if not all, doubtless have the same predisposing cause, and can be cured as easily.

I present the views embodied in this communication to the medical profession, asking that they be not condemned until proven erroneous. I have no doubt but that they will stand the test of investigation, and will ultimately be received as the true views relating to the cause and cure of sick headache.

I know that my theory, even if true, is liable to be brought into local disrepute by the correction of the defect of the eye being attempted by unskilled hands.

As a fitting close to this communication I would ask medical practitioners everywhere, if prepared to do so, to put every case of sick headache to the test, or if not prepared themselves for this kind of work, advise their patients to go to an oculist, that my theory may thereby be put to the test also. If my theory is erroneous, I want it to fall; if true, then millions who are now suffering may be permanently cured.

Many patients may appear to have perfect vision for distance, when it is only made so by continuous tension of the ciliary muscle. This tension can be overcome, and the muscle put at rest, by the use of atropia, when the true condition of refraction will be shown. The whole of the hypermetropia, whether latent or manifest, should be corrected, likewise whatever astigmatism may exist.

If this communication incites any one to investigate, that he may determine whether my theory is correct or erroneous, I would be glad to learn, through this journal or otherwise, the result of such investigation.

My theory is now before you. May it stand if true, may it fall if erroneous.

AN INSTRUMENT FOR THE REDUCTION OF FLEXIONS OF THE WOMB.

BY H. L. GETZ, M.D.,
Of Marshalltown, Ia.

About five years ago I devised, and have since used successfully, in a number of cases, the very simple and efficient instrument which will hereafter be described.

The objections to most, if not all, instruments used for the purpose above referred to are: First, when the flexion is severe it is impossible to introduce any of the instruments in general use without injury to the organ. Second, when introduced, if it is or can be done at all the point of the instrument encroaches severely upon the lining membrane of the womb, when an attempt is made to raise it into its natural position. Third, the instruments in use have not only the principal bearing at their point, but likewise upon a small point or surface; the same amount of force requiring to be applied for the reduction of the organ when the bearing is upon a small surface, as is required when it is made upon a larger one, the injury done to the part is apt to be correspondingly great as the bearing

surface is small. These defects are mainly overcome by this simple device:—

Plan of Instrument and its Application.—A common, flexible bougie (A), one quarter inch in diameter; A stylet (B), one-eighth inch in thickness, with plain handle; at opposite end, or rather about an inch and a half from end, the wire is somewhat reduced in thickness, and while firm enough to hold its shape, is tempered so as to have considerable spring, so that when straight, with a certain amount of force applied, it follows and springs around considerable of a curve. To facilitate the introduction and overcome the resistance necessarily encountered by the blunt point of wire coming in contact with the inner surface of the bougie, as the former is being pushed into the latter, a revolving disc (C), about one-eighth of an inch in diameter, is set in the end.

The best plan of application is to introduce the largest size flexible catheter or bougie which the canal will admit; with a very little skill these flexible catheters or bougies can be easily introduced into the womb, whatever may be the degree of flexion; now let it remain for a few minutes, and remove; introduce a next size larger, and so on, until you have reached say one-quarter inch in diameter; now you are ready to begin the replacement; the delicate mucous membrane is now protected by the bougie; now introduce within the bougie your stylet, being careful to guard it (should the flexion be acute and considerable force necessary to raise the womb), to prevent its breaking through the bougie and injuring the womb; after having reduced the flexion, the catheter with the stylet within it may be removed. The after treatment may be such as will keep the womb in position. I am in the habit of using a hard-rubber intra-uterine pessary, cutting off the top so that the point will not bear against the mucous surface within the upper part of the womb, and also that any secretions may escape through the opening in top of pessary as well as at its side. I think most trouble which is experienced by the use of intra-uterine pessaries arises from their being too long; the inverted cup, or whatever it may be, is held by the vagina closely against the external os, and the point of the instrument pressed firmly against the inside, at top of womb, soon to irritate and do harm. Mr. Wm. Snowden, of No. 7 South Eleventh street, Philadelphia, has permission to manufacture, and will be pleased to fill orders for any who will try this simple device and test its merits.

REMOVAL OF A TUBERCULOUS TESTICLE.

BY H. G. WELCH, M.D.,
Of Defiance, Ohio.

Patient, Jno. M., age 30. About seven or eight years ago the patient noticed that his right testicle was enlarged, but gave him no pain. It enlarged gradually, and he could feel lumps (to use his own expression) in the body of the gland. For quite a while previous to the suppuration he could feel a lump about the size of a large hickory nut in the testicle. The natural sensation of the gland was diminished, though not entirely lost. It only gave him pain by rather rough manipulation and by its dragging on the cord. To relieve the latter he wore a suspensory bag most of the time for several years. I believe this was the only thing done for the relief of the trouble, except his own treatment of the sore with salves, after it broke down and began to discharge pus.

Patient had scrofula in his youth and at times after he had reached adult life. His grandfather on his father's side died of pulmonary consumption, and also a sister died with the same trouble a little over a year ago. He seemed to have a strong constitution and enjoyed good health most of the time.

Four or five weeks before the operation the tumor broke down and began the discharge of a thin, watery pus, exposing a semi-solid, cheesy mass, which formed a partial or small hernia.

October 26th, 1881. Assisted by Dr. Harris, I performed the operation in the following manner:—

An incision from within one-half inch of and on a level with the penis, was made along the median line to the bottom of the scrotum. Another on the right side of the testis was made, including a portion of the scrotum, elliptical in shape (after contraction), one inch in width by two in length. The testicle was then exposed, but was so adherent that it had to be dissected out. The arteries of the scrotum were secured and tied or twisted as fast as cut. When the testicle was dissected loose two strong silk ligatures were placed around the cord, about three-

fourths of an inch from it, and tightly tied, and the cord then cut off half an inch below the ligature. No hemorrhage followed. The edges of the scrotum were then brought together by three sutures. The ligatures applied to the cord were left long, and protruded through the opening left at the bottom of the scrotum, and acted as drainage. The patient was then placed in bed, one-third grain of morphia given, and the wound dressed with carbolized water, which was the principal dressing during treatment. Had some trouble first night to pass his urine; after first night no trouble in that line. Slept well nearly every night. Had frequent desire for coition. (And I have my doubts whether he kept from it more than the first four or five days, although strictly enjoined to the contrary). On the night of the 30th, four days after operation, there was a profuse hemorrhage from a small artery, which escaped and ceased to bleed during operation. It caused some alarm, both to patient and myself, as I was hastily called and supposed it to be the arteries of the cord. It ceased, however, without interference, and subsequently bled a little, two or three times.

Mr. Erichsen advises that the cord be enclosed, in all cases, in mass, with a strong whipcord ligature, and left to slough off. Bryant also recommends the same procedure, and says, "when tightly tied there will be no pain from cord."

Frank H. Hamilton prefers to transfix the cord with a needle armed with a strong ligature, by which the cord may be held while the vessels are secured and made safe, and then may be left in place for four or five days, as a safety guard, by which, in case of secondary hemorrhage, the cord may be pulled down and the arteries again tied. He further says that in the only case in which he tied the cord in mass the patient suffered great and unnecessary pain.

In this case Mr. Erichsen's plan was followed, and found to be efficient, and gave the patient no pain, whatever. The cord sloughed off and came away on the fourteenth day. The patient was discharged on the seventeenth day, nearly well. Forty days after the operation the patient was shot through the heart and instantly killed. At the autopsy the wound was found firmly and nicely healed.

—Horace Greeley once emphasized the value of a vegetable diet by the remark that after Nebuchadnezzar had been turned out to grass it was never recorded of him that he suffered from indigestion.

Hospital Reports.

THE AMERICAN HOSPITAL FOR SKIN DISEASES, PHILADELPHIA.

CLINIC OF JOHN V. SHOEMAKER, A.M., M.D.

Reported by Edwin Rosenthal, M.D., Ph. G., Assistant Physician.

A Case of Pustular Syphiloderma Simulating Smallpox—With its Treatment.

Gentlemen:—To-day I bring to your notice a case which, for its clinical significance, I deem of great importance, inasmuch as it has caused quite a number of physicians to fall into a serious error, which I am happy to say has not ended so unfortunately as it might have done. The following is the exact history which I gleaned from the patient I now exhibit to you:—

His name is John W., a native of Scotland, and he is 20 years of age. His occupation is that of a waiter upon one of the ocean steamships plying between this port and Savannah, Ga. Two weeks ago he noticed an eruption appear on the chest, causing him but little uneasiness; this spread very rapidly, and he sought the advice of a physician in Savannah, Ga., who said his blood was out of order, probably from his mode of living; he prescribed some pills, and requested him to abstain as much as possible from the delicacies of the table. These pills had no effect upon the eruption; in fact, he says, they increased the breaking out until it had spread all over his body. His appearance in the cabin of the ship was such that he was excluded therefrom and placed by himself in another portion of the ship. The captain and the crew looked with some suspicion on his disease, and as far as practicable isolated him; and upon arriving in port (this city) sent him immediately to the Custom House, from which place he was directed to one of the large hospitals; (previous to his going to the hospital he was brought to a physician who diagnosed the case as smallpox and directed him to the smallpox hospital); the assistants there said he had smallpox and directed him to the office of the Board of Health. At the office of the Board of Health he was examined, and as there seemed to be some misunderstanding in regard to the diagnosis, the health officer sent him to me, with the request that we should examine him, and decide upon his disease, and if not contagious, take charge of him until he is cured.

On questioning him I elicited the facts as above stated, with the following additions: He had had intercourse about eight weeks ago, in Savannah, Ga.; he had never noticed any sore upon his penis; and is perfectly unable to say how he acquired the disease.

We will now have him undressed, and I shall examine him before you. You see he is covered all over with a pustular eruption, very much resembling the appearance of smallpox—particularly on the face and arms. Opposed to this eruption being smallpox, we have, first, the history: occurring on the trunk, and then spreading to other parts of the body, while in smallpox it first appears on lips, palate and forehead. Secondly, we have no constitutional disturbance—the pain in

the back, calf of the legs, etc.; and then the appearance of the eruption: the pustules here are small and pointed, while in smallpox the condition is very different; the eruption, appearing first papular, after about a day becomes vesicular, then pustular, and on the eighth day of the eruption the pustules mature and become umbilicated; none of these changes have we here; and on the skin at the gluteal region you can see distinctly the coppery hue of the fading pustule. In the groin I can also feel the lymphatic glands enlarged, and in drawing back the foreskin I show you the scar of the chancre. This is, therefore, beyond all doubt, a very bad case of pustular syphilis. The patient, nevertheless, reiterates his statement that he had no knowledge of its presence. On the left arm you see a tattooed picture, and at first thought—not having examined the penis—I imagined this could have caused the disease. I have seen cases before result from tattooing the skin, and some years ago there were exhibited at the Philadelphia Hospital a number of patients suffering from different syphilitic affections resulting from being tattooed by the same man, who, on being caught and examined, showed every symptom of syphilitic impregnation, with mucous patches in the mouth, from which he had transmitted the syphilitic virus by holding the needles in his mouth when he went through the manipulations of tattooing the patients. Now, having arrived at the truthfulness and certainty of our diagnosis, I will call your attention to the method I shall pursue in the treatment of our patient.

Some years ago my attention was called to the "hypodermic injection of corrosive sublimate" in syphilitic disease, by Dr. Julius Kæmmerer of this city, who not only practiced the same with satisfactory results, but instructed his pupils, Doctors L. Wolff and Edwin Rosenthal, in its use. I have used this method of treatment in over one hundred and thirteen cases, within the last three years and a half, and can speak with some certainty of its results. I propose to use this treatment here, and shall use nothing else whatever, and you will, therefore, be able to watch from time to time the process of the cure, with me. I will now show you the method of making the injection, but before doing so, I will give you a few precautions, which I strongly advise you to follow. In the first place, see that your syringe is kept clean, and always use a glass one. Experience has taught me that they are superior to the metal or rubber syringes, for the following reasons: The metal syringe corrodes after using a few times, and becomes utterly unfit for use; and the rubber syringes are of too light material, they will very easily break. In the second place, look to your needles. See that they are well cleaned, free from rust, and of sufficient length. If they are dirty or rusty, they will act as an irritant, set up inflammation and cause abscesses. And if they are insufficient in length, they will not enter deeply enough, and instead of depositing the solution in the cellular tissue, where the absorbents can quickly act upon it, they will deposit it into a stratum of the skin where there are no absorbents, and thus again act as an irritant, set up inflammation, and cause abscesses. Again, in using needles, try to get one of gold, which, in my experiments, I have found the best, though those of steel will answer the purpose, if they be kept well cleaned and pointed. Also advise your patients to procure a syringe of their own, or if this be found impracticable get a needle for each; you will thereby lessen any chance for contagion. And also, when you are through with your needle, after an injection, see that it be well cleaned and oiled and run through it a bristle, well oiled. I have found that when you use a bristle, you keep the needle not only cleaner, but you lessen the chances of its rusting soon. A metallic wire run through the needle is one of the most certain causes of its early rust. If you follow out these precautions, you will be saved many annoying failures, and success will crown your efforts.

Now, in injecting the sublimate solution, I use a solution of the strength of one part of corrosive sublimate to one hundred parts of distilled water. In this proportion I find that I can more easily divide the dose I wish to give, as most of the hypodermic syringes are divided into tenths, and therefore a syringeful would very soon tell you how much corrosive sublimate you are using in the injection.

I generally make the injection either in the infra-scapular or sacral regions, because I have found these parts the least susceptible, and again they contain more cellular tissue than any other part of the body. Sometimes the injection is followed by a burning pain, which may be from the slightest annoyance to the most intense, varying with the susceptibility of the patient; it is often aggravated by the patient lying upon the spot of puncture. For the relief of this pain I tell the patient to rest quietly, and if it is not then relieved, I apply a lump of ice to the part; some use morphia in combination with the corrosive sublimate in the injection, for the relief of this pain. I have had unusual good results in my injections, as it was very rarely that intense pain followed the puncture.

Now, gentlemen, you will notice how I make the hypodermic injection; I seize a fold of the tissue in the infra-scapular region with the thumb and forefinger of my left hand, and push the needle of the syringe, held in my right hand, deep down into the cellular tissue, and I slowly press out the contents of the syringe; I then remove the syringe by a rotary motion, pressing back the tissue with my finger of the left hand and with the other fingers slowly distribute the solution into the surrounding tissue, by gently pressing and kneading about the point of injection. Before making the injection I see that all the air is forced out of the syringe, and I always oil the needle with pure olive oil before I push it through the tissues.

This will be the only treatment pursued here, and at my next clinic I will bring this patient again before you, and you will be surprised to see the change that will take place in the appearance of the eruption. You will see the pustules dry and gradually disappear, and in a few weeks we will discharge our patient cured. I will order my assistant to give him one injection of one-tenth of a grain of corrosive sublimate daily, and that he should increase it, mimim by minim, every day or every other day, as our judgment may di-

rect, till we have him under the influence of the drug, and then we will slowly decrease the dose until our patient is cured.

In speaking of the hypodermic method of treating syphilitic affections, I must say that I believe it to be the only rational method of eradicating this disease.

Why? I have treated patients by internal medications over and over again, with the most unsatisfactory results. In one case that I now recall, I have given grain after grain of calomel, corrosive sublimate, and the other salts of mercury, for nine months, until I was thoroughly disgusted with it; and then using hypodermic injections, I was soon able to discharge my patient cured. This method I have used in the most obstinate cases, and have yet to see a total failure. It begins its good action in a week or ten days, and as soon as this has been obtained the treatment progresses very quickly to a cure.

I now wish to rid your mind of an error in which we commonly believe: Some authors say that mercury acts internally by forming an "albuminate." I do not see how this can be possible, as albumen is the antidote for corrosive sublimate, and if it should form an "albuminate of mercury," I cannot see what good it would do. In administering mercury internally it forms, I think, an "albuminous mixture" or solution, and the reason that we have such bad results from the use of this drug is this: The mercury may form an insoluble albuminous mixture, which will not remain long enough in the body to become absorbed, but passes out with the stools. This can never take place by the hypodermic method, for it becomes, shortly after depositing it in the tissues, absorbed, and begins at once its good action.

Syphilitic Periostitis.

The next case I show you is William O., age 35 years. He is suffering from syphilitic periostitis of the metacarpal and phalangeal bones of the left hand. In him I wish to demonstrate to you the process of cure as it is taking place, by the use of hypodermic injections. In the first case I showed you the beginning of the treatment; in this case I show you the process of cure which is near the end. Now, it will be of great interest to you to know the history of this case, with the history of the treatment; and I brought him before you for this purpose, and also to show you the extent of the disease. The difficulty in the hand began last July; previous to this he had evidences of syphilitic sores on all parts of the body, and presented evidences of scars where the syphilitic sores were. After being under the treatment of several physicians he applied at the Hospital for relief. At this time I found the hand and fingers enormously swollen, covered with tubercles, some in the process of formation and others in the process of ulceration, and, upon examination, I found gummy deposits were formed along the course of the metacarpal and phalangeal bones. He had received treatment of all sorts and varieties, and when he came to me, with the parts so enormously swollen, I immediately plunged a bistoury into the inflamed and swollen mass, down to the bone, to relieve tension, deplete the parts, and give vent to the accumulated pus. The operation gave him immediate but only temporary relief, and he soon returned to me, and I, from time to time, made use of the bistoury, without any decided and permanent benefit, until at last I began the use of the hypodermic injections, with the result you see here: The inflammation has subsided, the infiltration has become absorbed, and here you see him come back almost cured.

In conclusion, I would advise you to use this method of treatment in your practice, for the following reasons:—

First. For the quickness of its action, as you will see by the first case I showed you; for what treatment can act as quickly as this method.

Second. For the accuracy and precision of its dose, and—

Third. Which is important to the physician, the simplicity and "easiness" of its application. Here one may in a very few moments measure out and give the desired dose, and the method is so simple that it could easily be learned by the most ignorant; besides, any uncomplicated system of medication is sure to be acceptable to the physician of average intelligence.

I again recall your attention to the precautions I have advised, and tell you that much of your success will depend upon them. Much of the ill success recorded by European and other observers depends upon a neglect of the commonest rules to be followed in any hypodermic injection. Some of them use the solution in a too concentrated form; others, again, use it in a too dilute form, hence they must inject twice and thrice the quantity at one time, to get the result, and thus set up inflammation and its results. Others, again, do not give the remedy time to act; while the majority of physicians do not care to take the trouble of giving a hypodermic injection every day.

Here, then, gentlemen, I have demonstrated to you one of the best methods, I think, there is for the treatment of all syphilitic affections, and in concluding, lay particular stress on one subject I very near forgot mentioning to you: Do not forget the susceptibility of some individuals to the use of mercurials; if you should meet such a patient, the only precaution you need is to begin with the smallest doses and slowly increase.

Aloetic Pills.

M. Audhoui, in *Le Médecin Praticien*, considering that the preparations containing aloes in general use are of too irritating a nature, recommends the following pill mass, which he constantly uses:—

℞.	Aloes pulv.,	ʒ ss
	Potass. bitart. pulv.,	ʒ ss
	Sapo. amygdal.,	ʒ j
	Acaciæ gum pulv.,	ʒ ss
	Syr. simplic.,	q.s.

Mix carefully the powders and soap, add the sugar and divide into 100 pills.

M. Audhoui prescribes one, two or more of these pills, according to the condition of the digestive organs, after meals.

EDITORIAL DEPARTMENT.

PERISCOPE.

Multiple Sarcomata.

In the *Medical Times and Gazette*, Dr. A. R. Anderson records the following unusual case:—

J. B., aged forty-three, was admitted into the hospital on May 3d, 1880. He said that up to four months previously he had been in good health, and at that time he wrenched his shoulder at work, and soon after noticed a swelling on it, which was shortly followed by like swellings on the chest and head, the rapid increase of which, both in number and size, caused him to apply for admission into the hospital.

On examination, he was found to have eight tumors—three of which were situated on the front of the chest and five on the head. Those on the chest were placed one on either clavicle, the third over the upper part of the sternum. The one on the right clavicle was the first to appear; it lay over the inner third of the bone, and had existed for four months. It increased rapidly in size, and had at this time attained the dimensions of an orange, measuring three inches and a half along its greatest semi-circumference, and two inches and a quarter along its shortest. It was rounded, hard, painless when touched, and firmly connected with the subjacent bone. Over the sternal end of the left clavicle was a much smaller swelling, having the same characters, and measuring one inch by one inch. The third, on the sternum, was irregular in shape and flattened; it measured two inches by one inch.

Of those on the head, the largest was seated in the centre of the forehead, and was rounded, and quite soft and semi-fluctuating, especially in the centre, differing markedly in this respect from those on the thorax. Close to the lateral boundary of the forehead another tumor existed on either side. These were not more than a quarter the size of the previous one, but possessed the same general characters. The fourth was over the left parietal bone, and was quite small. The fifth and last of these growths lay near the apex of the lambdoidal suture, and had a somewhat remarkable history. Five weeks before his admission, it was stated to have been the size of a pigeon's egg; since then it had diminished much in size, again increased, and again disappeared. Its site was, at the time of his admission, only marked by a soft, boggy patch, about one inch and a quarter in diameter and very slightly elevated above the surrounding integument. The edges of the patch were firmer, and gave the sensation of a ring. The subjacent bone felt firm and hard.

With regard to his general condition, he was fairly well developed, and had been muscular, but had lost flesh latterly. He ate and slept well, being free from pain. There was nothing in the family history bearing on the nature of his complaint. Was ordered to take a mixture containing ten-grain doses of iodide and bromide of potassium three times a day.

On June 1st, while helping another patient into bed, and without making any undue muscular effort, his right humerus broke, with a loud snap. A transverse fracture was found in the lower third of the bone, and the limb was put up on an angular splint. There had been no improvement up to this date in his condition; indeed, the growths had increased in size, and another had appeared over the left mastoid process. There was, however, no sign of any tumor at the seat of fracture.

June 19th. Fracture of the left humerus was caused to-day in the lower third of the bone, by the very slight muscular effort employed in raising the corresponding hand to his head. He had been warned to be cautious in his movements, and had lifted his arm slowly and deliberately. There was no appearance of a new growth in this situation; but the left eye had become prominent and vision much impaired, clearly indicating one within the orbit.

He was now in a sad state of helplessness, and decided shortly to go home. He was discharged on June 26th, and subsequently attended by Mr. Joseph Thompson, through whose courtesy I was enabled to watch the case to its termination.

After leaving the hospital the swellings increased enormously in size, and fresh ones appeared; at the same time he grew rapidly weaker, and shortly before death his condition was as follows:—

On the *head*, the tumor in the centre of the forehead was as large as a saucer, flattened on its surface, and raised four inches from the surrounding skin; the integument over it was thickened, almost horny, and pigmented, being of a dark brown color; large veins were to be seen traversing it. The forehead tumors on either side of this one were somewhat larger than when he went home, but had not increased in size so rapidly. Behind the left ear was a swelling as large as a hen's egg, and another of the same dimensions existed now over the posterior fontanelle; a third, rather smaller than these, was situated just above and behind the right ear. The left eyeball was protruded on to the cheek, and vision entirely lost. A red, sprouting, granulating mass projected here.

The tumors on the head had these characters: They were not so distinctly circumscribed as those on the body; they were softer to the touch, semi-fluctuating in some parts, and had surfaces which were fairly smooth or only slightly tuberous; they were firmly fixed on subjacent parts, and could be handled without pain; neither the skin covering them, nor the neighboring lymphatic glands, were involved.

On the front of the *chest*, five of these growths were situated. The largest lay partly in front of and partly below the right clavicle, and was the size of a cocoanut; a second was situated over the inner third of the left clavicle, a third over the centre of the upper part of the sternum, a fourth also in the middle line below this. All these were about half the size of the first-men-

tioned, and the fifth was larger; it occupied a spot immediately below the left nipple. They were all firm and hard, with distinctly circumscribed outlines and nodular surfaces, painless when touched, and firmly fixed. There were no glandular enlargements or skin implication. On the right acromion was a single tumor, and a corresponding one lay on the left, with a third just below it, connected with the humerus—all the size of eggs, hard, nodular and immovable. There was not the least attempt at union in the fracture, either of the right humerus or of the left, and in this situation there existed now, on each side, a swelling as large as an orange, firm, fixed, and evidently growing from the interior of the bone; and lastly, in the middle of the extensor surface of each forearm was another tumor, having the same characters as the above and being of almost the same dimensions.

He was in a state of extreme emaciation, and on the sacrum was a bed-sore. He complained much of weariness and general soreness, he said, from lying, and required to be constantly moved. Pains in both knees were causing him much trouble, but there were no signs of any tumors there. Percussion over the thorax and abdomen did not detect any abnormal dullness, and there was no enlargement of the abdominal viscera. He gradually sank, and died on the morning of Christmas day, 1880. His intellectual faculties remained clear to the end.

Rheumatic Diathesis and the Initial Lesion of Syphilis.

Dr. C. B. Lockwood thus writes, in the *British Medical Journal*:—

Most observers are agreed that the course of syphilis may be greatly modified by the diathesis of the patient. Reference to the writings of authorities on syphilis, and to their discussion at the International Medical Congress, shows that their observations are extended chiefly to the later stages. I am not aware that any one has recorded observations showing that the rheumatic diathesis can modify the initial lesion. Primary syphilitic sores come under notice, which at first present ordinary characters. They afterwards become "inflamed and phagedænic" (Hill and Cooper, *Manual of Venereal Diseases*, London, 1881, p. 466), and may cause considerable destruction of tissue. Many attempts have been made to explain this occurrence (*Ibid.*, p. 468); debility, patients' habits, position of the sore, and peculiarities of the virus, have all been adduced. In the cases mentioned below, all of these can be eliminated, except the last. If the infecting virus in such cases as these be peculiar it must expend its peculiarities upon the sore, for the other manifestations are not unusual. Moreover, these sores do not cause similar ones when inoculated. It therefore remains to explain what Messrs. Hill and Cooper state, and what personal observation has frequently confirmed, why "patients are met with who, but for the rapidly necrosing chancre itself, present every sign of good health" (*Ibid.*, p. 469). The following cases may suggest a cause. They are not numerous, but seem to be more than coincidences:—

A patient, aged 26, came under my care in September, 1879. He had what appeared to be an excoriation near the frænum. Ordinary applications had no effect upon it. By the end of September the sore was larger and considerably indurated; not inflamed or particularly ulcerated. The inguinal glands were indurated. About the beginning of October the character of the sore changed. It became inflamed, very painful, and excavated. There was a profuse, thin, and slightly sanguineous discharge. Small sloughs occasionally separated, and the ulceration extended until about a quarter of the glans penis was destroyed. The appearance of the disease at this time was quite characteristic. The sore was acutely inflamed and phagedænic. In November there was acute inflammation of the dorsal lymphatics of the penis, with roseola over the chest and belly. The treatment adopted locally, during the whole course of the disease, was the use of warm baths and the application of iodoform. Constitutionally, two and a half grains of blue pill were administered night and morning. The effect of mercury was to cause the sore to spread, and increase the pain. Iodide of potassium with tartrate of iron was given, in increasing doses. Opium was administered, to relieve the pain. Improvement was rapid and continuous, and the sore healed. Afterwards, the patient had a slight tubercular syphilide and ulcerated throat. These were relieved by increased doses of iodide of potassium (30 grains) three times a day, and calomel vapor baths (15 grains) every other night. About February, 1880, he discontinued the iodide of potassium, and took half a grain of green iodide of mercury each night, for a few months. He is at present free from symptoms.

There did not appear to be anything to account for the course of this patient's disease. He had not taken mercury before the inflammation began. He appeared strong and healthy. His circumstances were comfortable, and his life regular. The following case seemed to throw some light upon it. About December, 1880, W. H., aged 25, a bookbinder, came under observation in St. Bartholomew's Hospital. He had an inflamed and phagedænic chancre, which resembled, in all its characters, that of the first patient. He also had lymphatic engorgement and roseola. His throat was ulcerated. Mercury increased the ulceration, which had destroyed about a quarter of the glans penis. Iodoform was therefore applied to the sore, and iodide of potassium and tartrate of iron were administered internally. By the end of January, 1881, the sore was healed, the patient left the hospital, and has not been seen since. There was nothing about this patient which would account for the inflammation and phagedæna. He, like the other, appeared strong and healthy. However, I remember that the first patient was very rheumatic. He had suffered from rheumatic fever twice, and from one or two slighter attacks. He had had endocarditis and iritis. Upon inquiry it was found that W. H. had been laid up in the London Hospital seven years before, suffering from rheumatic fever. He said his heart had been affected, but no murmur could be detected. There was no family history of rheumatism.

Two other cases, in which hard sores became inflamed and phagedænic, have come under notice. In one there was a clear history of previous rheumatism. The other had never had rheumatism; but his father had had rheumatic fever, and his mother suffered from chronic rheumatism. This case is progressing favorably, iodoform being applied to the sore, and $\frac{1}{12}$ grain of bichloride of mercury given three times a day. It may be mentioned that he had inflammation of the dorsal lymphatics of the penis. This occurring in two cases denotes the intensity of the inflammation. Mr. Hutchinson, in the *Medical Times and Gazette* (quoted by Hill and Cooper, page 469), has attempted to account for the origin of phagedæna. "He considers the patient's temperament. Certain persons have special proclivities to acute inflammation; and such a patient, if attacked by a chancre, would be more likely to have a phagedænic form of chancre." Bearing this in mind, and remembering how prone rheumatic patients are to inflammations, it might be anticipated that in them chancres would become inflamed. Four cases form insufficient materials from which to draw sound conclusions. But these are suggestive, and serve to bear out theoretical considerations.

As regards the treatment of these cases, in two mercury certainly did harm. The third was not under observation a sufficient time to form any conclusion. The last is improving under very small doses of a mild preparation. He had never had rheumatism himself, and his predisposition was probably least. Experience teaches not only that phagedæna is seldom benefited by mercury, but also that iodide of potassium is good for rheumatism. It can, therefore, be understood why these cases were so amenable to treatment by the latter. Therefore, in cases of syphilis in which the initial lesion is inflamed and phagedænic, and in which there is a history of rheumatism, it is probable that iodides will be of service at an earlier stage than usual. Mercury should be administered with the greatest caution, if at all.

Hyperpyrexia in Acute Rheumatism.

A Committee of the Clinical Society to whom the question of hyperpyrexia in acute rheumatism had been referred made their report to the Society, May 26th. From the *Medical Times and Gazette* we glean the following conclusions that were arrived at:—

1. That cases of hyperpyrexia in acute rheumatism appear to prevail at certain periods, having in the last decade been remarkably numerous in the years 1873-76, whereas latterly they appear to have been much less frequent. That such excess corresponds in a certain degree, but not in actual proportion, to a similar excessive prevalence in acute rheumatism generally. That the largest number of cases of hyperpyrexia arose in the spring and summer months, whereas rheumatism is relatively more common in the autumn and winter.

2. That while very little difference obtains between the two sexes in regard to proclivity to rheumatism, the proportion of males to females exhibiting hyperpyrexial manifestations is 1.8 to 1, but that as to age no such marked difference exists; nor as to occupation.

3. That the subjects of hyperpyrexia show no undue rheumatic tendency as regards family predisposition.

4. That cases of hyperpyrexia preponderate in first attacks of rheumatic fever.

5. That hyperpyrexia is not necessarily accompanied by any visceral complications, but may itself be fatal. The complications with which it is most frequently associated are pericarditis and pneumonia.

6. That the mortality of these cases is very considerable, hyperpyrexia being one of the chief causes of death in acute rheumatism.

7. That although present in a certain number of cases, and then of much value, from their prodromal significance, neither the fact of the abrupt disappearance of articular affection, nor the similarly abrupt cessation of sweating, is an invariable antecedent of the hyperpyrexial outburst.

8. That the supervention of delirium or other symptom of nervous disturbance is very frequent, either antecedent to or simultaneous with the hyperpyrexia.

9. That there is considerable variability in the date of the occurrence and in the duration of the hyperpyrexial condition, ranging, according to our observations, at least, from the fourth to the thirtieth day.

10. That when death results it has occurred mostly in the second and third weeks of the rheumatic attack.

11. That the post-mortem examinations in a certain proportion elicited no distinct visceral lesions, and that, when present, the lesions are not necessarily extensive.

12. That the prompt and early application of cold to the surface is a most valuable mode of treatment of hyperpyrexia. That the chances of its efficacy are greater the earlier it is had recourse to. That the temperature cannot safely be allowed to rise above 105°. That failing, the most certain measure—viz., the cold bath—cold, may be applied in various other ways; by the application of ice, by cold affusions, ice-bags, wet sheets, and iced injections.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——Dr. W. O. Roberts, of Louisville, in a report read before the Kentucky State Medical Society, gives a useful review of the progress of surgery in 1881.

——That fortunately rare disease, Cancer of the Lung, is the subject of a reprint by Dr. G. W. H. Kemper, of Muncie, Indiana. It is almost needless to say he regards such cases as absolutely hopeless. The only palliation is opium.

——Now that the manœuvre of lithotrity is generally approved of, the observations upon it by

Dr. Reliquet deserve close reading. The little pamphlet published by A. Delahaye, Place de l'Ecole de Médecine, Paris, is entitled "La Lithotrite doit être faite sans Traumatisme," and the title expresses the whole of the author's aim. The argument is well put and forcible.

——An able summary about asylums and their reports is given in a reprint by Dr. C. L. Dana, of New York City. He estimates that the number of insane in the United States in 1880 was about 90,000; of these, in asylums about 40,000. There are more insane in New England than elsewhere, but the rate is decreasing there. The annual cost per patient is from $200 to $250. He closes with some just criticisms on the reports, which we quote:—

What, as a medical man, one would criticise most, is the absence of the scientific spirit in the gentlemen who are the authors. To run an asylum on an economic basis is something, but it is not all. There is a science known as psychiatry. We have in this country three hundred gentlemen who have almost exclusive opportunities of studying it upon their forty thousand patients. But they, as a rule, contribute nothing of real scientific value to our literature. Such a thing as this is unparalleled in any other civilized country, or in any other medical specialty.

——A reprint by Dr. C. T. Bull, of New York, treats of syphilitic diseases of the lachrymal apparatus. He divides them into lesions of the lachrymal gland, of the caruncles and of the passages. When the inflammatory action is severe, he uses mercurial treatment, and remarks:—

"A very excellent method of administering mercury in these cases is to use two drachms of mercurial ointment, by inunction, upon the inner aspect of the arm or side of the chest, and at the same time give the mild chloride internally, in doses of grain one-sixth to one-fourth every hour or two, carefully watching for the first symptoms of the action of the drug. In many cases a beneficial effect upon the lesion will be observed on the third or fourth day, and then the mercury may be either entirely discontinued, or given in smaller doses at longer intervals. In many of these cases complete recovery follows such a course of treatment; all signs of inflammation and obstruction in the duct disappear, and the patency of the duct is restored without any incision or probing.

BOOK NOTICES.

Transactions of the American Gynecologial Society. Vol. VI. For the year 1881. Philadelphia: H. C. Lea's Son & Co. 1882.

This handsome volume appears with all the æsthetic elements of toned paper, antique type and gilt edge, which characterized its predecessors. Gynecologists have so much to do with the fair sex that they have contracted its love of finery, we suppose. Many solid articles will be found in its 542 pages, and the indexes of the literature relating to gynecology and obstetrics, added at the close, are especially useful. The writers are numerous, and as we cannot pretend to do justice to all, we shall mention only a few, not meaning that they are, for that reason, the most important.

Dr. Jenks' article on the practice of gynecology in ancient times is the sort of contributions we like to see, as there is entirely too little attention paid in this country to medical history. He condenses a great deal of interest in a few pages.

Dr. Bozeman's article on "Genital Renovation" has in it much of value, but we must condemn the appearance of pedantry in his nomenclature. Is there any real advantage in writing language like this: "Genital renovation, or genital anakainosis, as opposed to genital kleisis, particularly by kolpostenotomy and kolpoecpetasis in urinary and fecal fistules, without interference with the functions, is the title, etc.?" With an English-Greek lexicon at hand, it is easy to fill a page with neologisms, but this mania, now so prevalent with certain specialists, does not advance science.

The subject of "Bursting Cysts of the Abdominal Cavity" is discussed with great clearness and with some very striking cases, by Dr. Goodell.

The proper treatment of that most obstinate complaint, lupus of the vulva, is clearly set forth by Dr. I. E. Taylor.

Several interesting obstetrical points were also touched on in the papers.

Practical Medical Anatomy. By Ambrose L. Ranney, A.M., M.D., etc. Wm. Wood & Co. 1882.

This is a new arrangement of anatomy, more on the plan of Hyrtl's work than any other we recall. It is aimed especially to serve the purpose of the practitioner, and connect anatomical with medical facts. The project is a good one, and Dr. Ranney has carried it out well.

We have noted occasionally loose statements, as that (p. 15), owing to an imperfect development of the frontal sinuses in the Australians, a want of resonance to the voice is produced! The authority for this dates from 1700 (!) and it is an absurd fiction, their class of languages being vocalic and resonant (Müller *Grundriss der Sprachwissenschaft, Bd.* II, § 1).

The illustrations and paper cannot be mentioned with praise. The volume is one of Wood's Library of Standard Medical Authors.

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THE LAST SCENE OF A SAD HISTORY.

The imperfect reports of the examination of Guiteau's brain hurried into some of our contemporaries were sufficient, however, to indicate that no marked anomaly, either in symmetry or normal character of brain substance, was found. This is borne out by the more ample details now published.

Of course, this is far from conclusive that there was no mental aberration; it may be said neither to tell for nor against that hypothesis; but the confident assertion of some of the experts, that there was marked asymmetry of the head, that "any one could see that Guiteau was a lunatic," etc., receive a well-merited rebuke from this investigation.

It is to be regretted that, like so much in connection with this unfortunate case, here too an opportunity for a professional wrangle offered itself, and was at once seized upon. Not only this, but the public all over the land was made acquainted with matters relating to the quarrel which should have been regarded as belonging to the personal relations of those concerned.

Must this washing of professional dirty linen in public continue, without an effort to stop it? There is a legitimate difference of opinion on many—shall we say on most?—professional questions, and for the one side or the other to pour its grievances into the long and ready ear of the first newspaper reporter who presents himself, is very discreditable.

We extract the following from the official report, as of most interest in the case:—

Head.—The first thing noticed was a scar on the scalp, an inch long, situated longitudinally, just above and behind the left temple, but there was no corresponding mark upon the skull. The right parietal bone was slightly flattened in its upper and anterior part, covering about two inches square and terminated at the coronal suture. This flattening was confined to the outer plate, and was at the expense of the diploic structure, as there was no bulging of the inner table, immediately beneath, that could be discerned. It was regarded of such a trivial nature as to make it unnecessary to take accurate measurement by transverse sections of the skull at this point, or to remove the skull to the museum for more minute examination, and it was buried with the remains.

There were no other points of asymmetry noticeable. The cranial sutures were distinct. There was no visible trace of a frontal suture, the two halves of the frontal bone being thoroughly welded. On the inner surface of the skull the usual bony prominences were well marked, also the pacchionian depressions. No abnormalities were discovered. The thickness of the skull was not measured; but, to the naked eye, it was normal. The diameters and cubic contents of the skull were not taken, nor the relative size of the fossæ.

Brain Membranes.—The dura mater was quite strongly adherent in places to the inner surface of the skull, viz., near the trunks of the middle meningeal arteries; also near the longitudinal sinus in front, but could be stripped cleanly from the bone at all these points of attachment, as there was no roughening of the skull here or elsewhere. There was no exudation on any part of the inner surface of the dura mater. Quite a number of pacchionian granulations were distributed along the course of the longitudinal sinus. The cerebral sinuses contained but little if any blood. The dura mater, pia mater and brain were adherent to each other on both sides along a limited portion of the longitudinal fissure adjacent to the pacchionian granulations.

Arachnoid.—There were very well marked milky opacities of the arachnoid, but no apparent thickening, extending over the upper portion of the convex surface of the hemispheres only; as elsewhere, the membrane was perfectly normal. These opacities were confined to the upper portion of the sulci in this vicinity exclusively, and were such as are often found without previous history of disease. The sub-arachnoid space contained very little fluid. Pia mater was easily

stripped from all parts of the brain. The blood vessels of the membranes and brain were empty, and the general appearance of the brain anæmic or bloodless. Sufficient examination was made of the large blood vessels of the brain to determine that they were in a healthy condition.

Brain.—The brain entire, with a portion of dura mater attached, weighed 49½ ounces, about the average weight for an adult male. The consistence of the brain was normal; its specific gravity and measurements of its chords and arcs could not be obtained, owing to lack of facilities. There was no apparent asymmetry of the two hemispheres. As regards contour and shape, exact studies were not made, and the comparative weights of the different parts were not obtained; cerebellum was well covered; the occipital lobes were not noticeably blunt or sharp.

There was an obvious want of precision in making the explorations, as is seen from the above. The blame for this, of course, each party wants to throw on the other. It is one of those disputes in which the unprejudiced observer will divide the onus about equally.

So ends a history which has been throughout, in its medical and surgical relation, with regard both to the murderer and his victim, one to which the profession of the United States cannot "point with pride." It has been a series of blunders, misstatements, and quarrels, beginning with a flagrant violation of professional courtesy, and concluding with an effort to dodge the blame of a slovenly-conducted post-mortem.

CONFIDENTIAL COMMUNICATIONS TO PHYSICIANS.

The following words of advice have been rendered necessary because of the freedom, the unwarrantable license, with which many physicians are wont to discuss the secrets of the consultation room. Many conscientious men who would not disclose the confessions of patients to those outside the pale of the profession, yet hesitate not to detail names and cases to their professional brethren, who in turn relate them to others, until in many cases they reach the ears of friends or relatives of the patient, and his character is justly or unjustly, as the case may be, but none the less surely, injured. Patients rarely ask secrecy from their physicians, either because they do not think of it, or else they take it for granted. Still, the physician is none the less bound to secrecy; and the conscientious medical man will so consider it. The secrets told in the consultation room of the physician should be as sacredly guarded in the innermost recesses of his most secluded nature, as are the revelations made to the Roman Catholic priest in the confessional. If we but stop and reflect for a minute, all of us in active practice can recall many instances where, by a breach of this implied trust, the character of a man or woman could be utterly and completely ruined for life, while the whole foundation of the domestic happiness and prosperity of many families could be razed to the ground by but a few ill-timed and uncalled for words from the physician. The story is related, on most undoubted authority, of a murder that occurred some years ago in Ireland. The victim was the brother of a parish priest, and no trace of the murderer could be found. A year or so afterward a man well known to the priest revealed to him, in confession, that he had murdered his brother. He received absolution for his crime and went his way in peace. For fifteen years this man lived in close proximity to the brother of his victim, whom he met every few days, and not a breath of suspicion did the priest utter against him, so sacred did he hold the revelations of the confessional. Finally, after this long period, one night the murderer was sent to summon the priest to the deathbed of one of his family who lived a mile or two from the village. While walking along the country road, they came to a lonely spot, when the priest's companion turning to him, said, "Father, this is the spot where I murdered your brother," and he then detailed the circumstances of the crime. The priest said nothing at the time, but the next morning had a warrant issued for the arrest of the murderer, who was tried, convicted and hung. For fifteen years this man had, through a sense of duty, stifled the instincts of nature, until, when the history of the crime was admitted to him outside of the confessional, he felt at liberty to bring the criminal to justice. Here, then, is an example for physicians to follow. They should treat their patients' confessions as confidentially as did this priest the story of his brother's mur-

derer, lest by neglecting to do so they may cause misery altogether at variance with the philanthropic nature of their profession.

POST-MORTEM EXAMINATIONS.

There is a widespread and eminently natural aversion among the average public against allowing post-mortem examinations upon the bodies of relatives and friends. The dead brother, sister, mother, father, wife or husband is considered far too sacred to be desecrated by the knife of the surgeon; hence permission to make a post-mortem examination is, in the majority of instances, refused. That this ought not to be so, we all, as physicians, fully realize. It is an admitted and universally accepted fact that something can be learned, that some benefit to science can be derived, from a critical examination of every dead body. A careful and accurate ante-mortem diagnosis may have been made, the accuracy of which is fully attested by the autopsy; yet some anomaly of anatomical arrangement, or some pathological condition, unsuspected during life, that might account for some symptom so trivial as almost to have escaped notice, will serve as a small point, the aggregation of many of which may do much toward furthering the science of pathological histology. The more post-mortems we have, the more rapid will be our advance in all that pertains to the intelligent and practical, as opposed to the empirical and theoretical, treatment of disease. We of to-day, as a class, are opposed to cremation, because it is not the prevailing fashion of disposing of the dead; yet our ancient Roman ancestors, when in the zenith of their intelligence and power, considered this the most proper way of terminating the existence of the body. So with post-mortem examinations. We are opposed to them, and consider them harsh and unnatural, because they are not fashionable. Physicians should endeavor to combat and overcome this prudish and anti-scientific sentimentality. They should take every opportunity, in ordinary conversation with patients and friends, to impress upon them the benefit to science and the advantage to mankind in general that would accrue from a more general allowance of post-mortems. By degrees, this course would tend to break down the social barrier that now exists, until the public would come to regard the autopsy as much a necessity following the death of a relative, as they now do the funeral. By this means, easily and gradually accomplished, we would be enabled to prosecute our pathological studies with ten times the rapidity that is now vouchsafed to us.

NOTES AND COMMENTS.

An Important Contribution to the Physiology and Pathology of the Stomach.

Dr. Ludwig Eringer (*Deutsch Arch. f. Klin. Med.* Bd. 29, Heft 5 and 6) has contributed the following interesting observations to our knowledge of the physiology and pathology of the stomach:—

The author made a large number of experiments on himself and on many other persons, to decide at what time during the state of digestion free muriatic acid appears in the gastric juice. He found that the latter contained a plus of free muriatic acid during the second hour after a moderate meal, and during the third and fourth hours after an abundant and rich meal.

The examination of the gastric juice in a case of typhoid fever elicited the fact that the masses vomited during the period of the highest fever contained a large amount of free muriatic acid. As the results so far gained in this direction have been contradictory, this new addition to the chemistry of the digestion of persons suffering from high fever is rather important.

Examinations into the amyloid degeneration of the stomach showed, in eleven cases, that the vessels of the walls of the organ were also affected, more or less, by the same process of degeneration; frequently the muscularis, especially the muscularis mucosæ, often a part of the areolar tissue of the mucosa and the glandular structure, participated in the same morbid alteration.

The considerable dilatation of the stomach the author brings into causal connection with the coexisting considerable amyloid degeneration of the muscular walls of the organ. If the latter do not possess the tonus any more which is necessary to enable them to carry the weight of the contents of the stomach, a passive dilatation, its degree depending upon the amount of the contents, will temporarily ensue, and gradually

change into permanent dilatation, as the peristaltic movement becomes less and less sufficient for the locomotion of the contents of the organ.

Concerning the development of ulceration in cases of amyloid degeneration, the fact was noted, that it is not the amyloid parts which are attacked by this ulceration, but those parts which are not suffering from amyloid degeneration, but which, not being provided sufficiently with blood from the degenerated vessels, fall a victim to the destroying influence of the gastric juice, which only an ample supply of alkaline blood can prevent. The physiological function of the stomach in cases of amyloid degeneration of the vessels of the mucosa of the organ undergoes this change, as proved by the frequently repeated examination of the contents of the organ in five such cases; that the gastric juice, at the proper time, exhibits a want of free muriatic acid.

Regarding the symptoms during life by which the physician, under certain circumstances, may be able to recognize this participation of the stomach in the amyloid degeneration, Frerichs first drew our attention to the fact that in the beginning the appetite vanishes, and from time to time vomiting takes place, while the tongue is not coated. But Eringer contends that these symptoms are so little definite and subject to such diverse explanations, that they can hardly be considered as possessing any diagnostic value. According to E.'s experience, the amyloid degeneration of the vessels of the stomach by itself does not exert any influence at all on the appetite; so that we will have to await further observations. Vomiting with clean tongue, absence of tenderness in the epigastric region, and amyloid degeneration in other organs, are the symptoms mainly to be relied upon. In conclusion, we will only add, that the favorable action of acids, and especially of muriatic acid, in cases of typhoid fever, seems to receive an explanation by the facts above mentioned, and that the latter give us the hint not to administer acids, for the purpose of assisting digestion, immediately after a meal, as heretofore done, but about two hours after the same.

The Rapidity of Conduction in Patella-Reflex. (†)

A. Eulenburg has lately made some interesting observations concerning the so called patella-reflex. He employed the graphic method and observed results, which, in one direction at least, were quite decided and uniform. He found that, in healthy persons, with very, very rare exceptions, the length of time consumed after a strong tap on the ligamentum patella, till the quadriceps femoris responded by contraction (duration of latency), never exceeded $\frac{3}{100}$ of a second (=0.03226). Cases in whom this time is still shorter, and may be said to vary between $\frac{1}{100}$ and $\frac{2}{100}$ of a second were frequently noticed among strong and healthy adults. In cases where, from some morbid cause, this same reflex (?) excitability is increased, the duration of latency can fall even below $\frac{1}{100}$ of a second (to 0.016313). The (centripetal-centrifugal) paths, along which the impression and the motor-impulse have to travel, to cause this phenomenon, amount to about one meter in length, while the velocity of conduction in the nerves in the normal state is equal to about 33.9 meters in a second. If it be true, as cannot well be doubted after the careful researches of Eulenburg, that the duration of latency in healthy individuals varies between $\frac{1}{100}$ and $\frac{2}{100}$ of a second, and that the same is less, even, in pathological cases, then the theory of the reflex character of the phenomenon becomes a very doubtful one. Further, we have proof of the fact that the duration of latency diminishes in the same ratio as the phenomenon itself appears less pronounced; if the conduction in the centrifugal nerve-paths becomes so slow that it falls below a certain norm, the patella symptoms cannot be observed any more. This proves what Westphal contended from the very beginning, that these phenomena are not of a reflex character at all; they are in intimate connection with the so called muscular tonus and with the integrity of those peripheral paths which receive the irritation and carry it further. The latter theory would also better explain the absence of this phenomenon in locomotor ataxia; here the tactile sense is decidedly diminished, and the muscular tonus as decidedly decreased.

Successful Sponge Grafting.

In the *Medical Times and Gazette*, Dr. W. Winslow Hall reports a case of sponge grafting in a girl, age twenty, who was suffering from two large ulcers on the dorsum of the left foot. She was a pale, anæmic girl. The larger ulcer was three inches in diameter and one inch deep. The other one was smaller. She was given cod-liver oil, and charcoal poultices were applied to the sores, which were syringed twice each day, with carbolic lotion (one to forty). Under this treatment the ulcers took on a more healthy appearance. A thin slice of ordinary sponge was soaked in a very strong solution of carbolic acid for fifteen hours, and then carefully washed in a more dilute solution, till there remained but a faint smell of the acid. Bits of this sponge slice were now

packed into each ulcer until rather above the level of the adjacent skin, and a cotton bandage was applied over all. After about three months and a half, the patient left the hospital. Her progress was slow but uninterrupted. New skin spread gradually under the margins of the sponges, and as these margins became loose they were clipped away. The former ulcers are covered in by healthy skin almost on a level with the surrounding skin surface.

In this case the preliminary treatment consisted merely in disinfecting the sponge with carbolic acid. And as the case wore on it became evident that the sponge-tissue was not becoming incorporated in the patient's foot. It rose by degrees in the wound, and fragments were clipped away from its surface. In time it became stationary, and then new skin spread under its edges, so that, in fact, the sponge was slowly shoved out by the new tissue replacing it. In the event of the occurrence of a similar case it would be interesting to compare the quantity of sponge placed in the ulcer with the sum total of the fragments clipped away during the progress of the case. The employment of sponge-grafting was undoubtedly of value in this case. Nature had been allowed to treat two similar ulcers on the same leg, and had left two large cicatrices firmly adherent to the underlying bone. These caused great deformity, and could hardly be called perfect results. The result of the use of sponge-grafting was that a pliable cicatrix was obtained almost on a level with the neighboring skin; the foot was saved from deformity, and its usefulness was not impaired.

Phthisis Among Needle Manufacturers.

The *British Medical Journal* says: In his recent report to the Stratford-on-Avon Combination of Sanitary Authorities, Mr. G. H. Fosbroke again comments upon the not uncommon prevalence of phthisis among needle manufacturers. During 1880, no fewer than 45 deaths happened from this disease, 24 being registered in Alcester, which had then a population not exceeding 20,000; the remaining 21 deaths occurring in the Evesham and Stratford Districts, which contain together a population of not quite 26,000. Fourteen of the 24 deaths in Alcester took place in two sub-districts, both of which are needle manufacturing centres. A somewhat similar mortality was registered during 1881, phthisis being held responsible for 24 deaths in the Stratford and Evesham Districts (population 24,597), whereas in Alcester, with a population of 17,387, there were 26 deaths. Mr. Fosbroke regrets that he is unable to give an explanation of this mortality, since the inspection of these needle manufacturing factories does not come within his province. Whether it is in consequence of such trade employment, or that the workmen so generally keep their workshops too hot and "close," he is not in a position to say. This appearance of phthisis is, as Mr. Fosbroke observes, well worthy the consideration of factory inspectors; but it is also still more worthy the attention of the Medical Department of the Local Government, an inquiry by which, on the present state of the question as to the lung-diseasing conditions of various industries, is much to be desired. Such an inquiry was made on a large scale by the then Medical Department of the Privy Council, in 1860-4, and Mr. Simon always recognized the importance of continuing the investigations on the subject. A series of fresh inquiries by various inspectors was indeed begun under his auspices, in the year 1873, but the results were never published, and administrative changes put a stop to their further prosecution. The question is, however, one of no little hygienic as well as practical interest, and deserves exact and systematic study by a skilled investigator.

Carbolic Acid in Typhoid Fever.

At a recent séance of the Soc. Méd. des Hôpitaux (June 9th), a discussion occurred on this subject. provoked by the memoir of M. Desplats, of Lille.

According to this physician, carbolic acid has a very powerful antithermic action, the temperature being very speedily reduced, but mounting after a short time to the former figure. On this account sufficiently large doses are required, M. Desplats carrying the dose to several grams daily. The best method of administering the acid is by enema, from two to three drachms in ten to twelve ounces of water; if the urine becomes dark colored, it will be necessary to diminish the dose. As conclusion, M. Desplats considers carbolic acid a good anti-thermic remedy in typhoid fever, of facile employment and not at all dangerous.

In the discussion which followed Mm. Dujardin-Beaumetz, Damaschino, Rathery, and Siredey, mentioned cases where the carbolized enemeta had been retained and had induced grave collapse, the general temperature falling from 104° to 95°, sweating occurring to such a degree as to cause great anxiety.

M. Dreyfus employed this method for about a year at the Hotel Dieu, and had on several oc-

casions symptoms of collapse; the temperature remained reduced but about four or five hours, and the constant sweating seemed to wear out the patients. M. Feréol was of the same opinion, the course of the fever being in no degree changed by this medication, the constant sweating weakening the patients, and symptoms of collapse being often apparent. M. Dujardin-Beaumetz resumed the entire discussion by saying that carbolized enemata constituted a powerful antiseptic medication, but produced, sometimes, dangerous symptoms, and should be employed with caution.

Nitrite of Sodium in Epilepsy.

In the *Practitioner*, Dr. W. T. Law relates one case in which the nitrite of sodium proved so beneficial that it would seem well to record it, in order that the drug may have a more extensive trial in this terrible and hitherto intractable malady. The case was a typical one of epilepsy, occurring in a man aged twenty-nine, of a low order of intelligence, of unexceptionable habits as regards drink and morals. The seizures commenced after a prolonged season of excessive study in endeavoring to prepare for a college examination. The appended table gives the result of the various forms of treatment tried:—

Weeks.	Seasons.	Number of Fits.		Total.	Remedies Used.
		Day.	Night.		
14½	Summer.	—	28	28	Brom. of pot. sod. and am.
4½	Winter.	2	7	9	Borax.
23	Winter and Spring.	11	15	26	Bromides with intervals of iron and aloes.
22	Summer.	3	12	15	Bromides with bellad.
14	Winter.	2	1	3	Nitrite of sodium.

The Spread of Infection by Rags.

In the *Practitioner*, Dr. H. Franklin Parsons contributes a very interesting article on this subject, from which we note his conclusions as follows:—

1st. That cases of infection by means of rags do occasionally occur, although, comparatively speaking, not very frequently.

2d. That smallpox is the disease most likely to be thus conveyed.

3d. That all rag workers should be vaccinated and re-vaccinated.

4th. That dust should be avoided. The preliminary dusting of the rags before sorting is to be recommended, but the dust should not be allowed to contaminate the air of the work-room.

5th. That certain measures of disinfection are available, among which exposure to air, fumigation with sulphurous acid, and exposure to hot air or high-pressure steam may be mentioned, each of which has its advantages and drawbacks under certain circumstances.

6th. That in the absence of means by which it may be known whether or not rags have been infected, the cases in which disinfection would appear specially desirable are (*a*) rags from places where epidemics are known to exist; (*b*) rags in a filthy state; and perhaps (*c*) foreign rags, especially if coming within the two previous categories."

Recognition of Death.

At the recent meeting of the Connecticut Medical Society (Boston *Medical and Surgical Journal*) Dr. G. L. Porter called the attention of the Society to the fear of being buried alive, so prevalent among the public. He made quotations to show how this morbid idea had at times seized hold of the greatest minds. For this reason he wished to impress upon physicians the necessity of familiarizing themselves with the signs of death, so as to be able to allay the fears of overly nervous friends and relatives. After relating the usual signs, the speaker said that the tests offered by the ophthalmoscope were as decisive as any. After death the capillary redness of the disc is lost, and gradually the arteries fade out and become indistinct, until at last they are wholly indistinguishable. If any circulation is maintained, at least a pale redness will enable the capillaries of the disc to be seen.

Dr. Thompson mentioned as a test of death, a small black spot which appears between the iris and the outer angle of the eye, round or oval, enlarges and moves downward and inward until it reaches the iris, when it appears as a concave spot which slowly grows larger. Its cause is supposed to be the changes after death rendering the opaque coat of the eyeball transparent.

Obscure Epigastric Pain.

In the *Lancet*, Dr. Edward B. Gray reports a curious case of obscure chronic epigastric pain, in a man otherwise apparently healthy, which teaches how difficult it is to diagnose duodenal ulcer. The patient, aged 58, had complained of pain "across the pit of the stomach and through the loins" for two years. He was well nour-

ished, appetite good, epigastrium only slightly tender to pressure. He was regarded by his friends as a hypochondriac. Suddenly he vomited over twenty ounces of bright-red blood. He was ordered twenty minims of the tincture of the perchloride of iron every three hours, to keep to ice and iced water, and to remain absolutely at rest on his back. About midnight of the same day he passed between a pint and a half and two pints of clotted blood from the bowel. He passed no more blood, but two days subsequently he was suddenly seized with severe epigastric pain, fainted, and died in a few minutes. At the post-mortem, the stomach and intestines were found full of blood. The sole lesion discovered was a small, deep, ulcer, of the diameter of a split pea, clean punched out of the otherwise healthy mucous membrane of the duodenum. At the bottom of the ulcer was a small perforation in the pancreatico-duodenal artery. The other abdominal organs were healthy.

Ozonized Air as a Hypnotic.

C. Binz has made a number of experiments with ozone, which he published in the *Berl. Klin. Wochenschr.* (1 and 2, 1882). The idea, based alone on speculative reasoning, that ozone as such could never enter the circulation, because it would undergo chemical alteration before it ever could reach the blood, and that in case it even got into the blood it would produce difficulty in breathing, on account of development of oxygen, has been disproved by the following experiments of Binz. For the preparation of ozone he used W. Siemens' pipe for quiet discharge of electricity, provided with the latter by four Bunsen elements and an inductor capable of giving sparks of two ctm. in length. The ozonized air was carried to animals kept under a well ventilated glass globe. The influence of ozone on different species of animals is alike as to the kind, but different as to the degree of effect. In frogs only a slight depression is noted. They act under the influence of ozone as if half asleep. Rabbits, but still more, cats, exhibit a decided depression of the brain. These animals seem deeply asleep, the eyes almost totally closed, and they show no reaction when a tap is given to the glass globe. The respiration appears unimpeded. Investigation has proven that this state of depression ensues before the respiratory passages are anatomically changed.

The experiments on human beings, who inhaled the ozonized air by aid of the usual mask, resulted, after seven to sixteen minutes, in causing sleep. The sensation before the sleep was agreeable, and respiration easy. Just before sleep sets in the person is overcome by a feeling of indifference and seems to be dreaming. Pulse, pupils, and the color of the face are unchanged. With some persons a full sleep could not be induced.

If a large quantity of ozone is inhaled, symptoms of irritation may appear, besides those of depression, viz: irritation in the throat, cough, with twitching of muscles, nausea, and even vomiting.

While these experiments may not possess any immediate value, as the effect of ozone is too transient for the latter ever to be employed for surgical purposes, as nitrous oxide is used, they give us, at least, an explanation why, in cases of sleeplessness and nervous irritability, a sojourn at the seashore, in forests, and on mountains, is so highly beneficial, as in all these localities the air contains a large percentage of ozone.

Treatment of Ophthalmia Neonatorum.

M. Galezoswki's treatment consists simply in touching the conjunctiva with the following solution, using a camel's hair pencil for the purpose:—

℞. Argenti nitrat., gr. x
Aquæ destill., ℥j. M.

After touching with this solution, another pencil dipped in a solution of common salt should be passed over the parts, to neutralize the excess of the silver salt.

Such is the method exclusively employed by M. Galezowski in his opthalmological clinic at Paris; he uses no other means against excessive suppuration, intense chemosis or ulceration of the cornea, if they occur. And yet, out of 400 cases treated in his service, not one eye was lost. Treated in this manner the malady requires from five to six weeks for complete cure.

Tracheotomy.

In the course of a lecture on this subject by the late Professor John T. Hodgen (St. Louis *Courier of Medicine*), the following valuable paragraph appears:—

"Right here is a point to which I wish to call attention. Not infrequently—in fact, as a general rule, when a child has been struggling for breath for hours, it may be, and an opening is made into the trachea so that the air enters easily and freely—there will be, after one full inspiration, an entire arrest of all respiratory movements for

several seconds, so that one who is not prepared for it may be alarmed. But if you watch the face you will observe that even while the respiration is arrested the color is constantly improving; the livid hue is passing away, and the natural hue is returning to the lips and cheeks and brow, and after a few seconds, sometimes as much as half a minute, the respiratory movements are resumed, and the child breathes easily, falling into a quiet sleep. The explanation is apparent; the child was poisoned with carbonic acid, and there was oxygen in the air inhaled by the long inspiration after the trachea was opened.

Tannic Acid in Albuminuria.

The *Lancet* says that in the course of some experiments on albuminuria, Ribbert examined the influence of tannic acid on the excretion of albumen through the renal glomeruli. He found that when albuminuria was artificially produced in two rabbits, to only one of which tannic acid was subsequently given, and the kidneys were excised and heated, to coagulate the albumen, in the one receiving the tannic acid the amount of albumen was much less than in the other. From this and other experiments he concludes that albuminuria of traumatic origin may be arrested by tannin, and that it may prove useful in nephritis, as recommended by Frerichs. He believes that it will be useful chiefly in the earliest stage of nephritis, which he thinks always commences in the glomeruli, and that its use should be continued for a considerable time.

Pneumothorax and Tuberculous Orchitis.

At a recent meeting of the Soc. Méd. des Hôpitaux, M. Vallin presented a patient who had some time before suffered from orchitis, seemingly of traumatic origin. The inflammation in the testicle is subject to frequent exacerbations, accompanied by fever. M. Vallin is of opinion that the inflammation is of a tuberculous nature, for the patient presents all the physical signs of pneumothorax, but unaccompanied by any general symptoms.

This pneumothorax is evidently of tuberculous origin, for there exist evident signs of pulmonary excavations under the left clavicle.

Jaundice with Hydatids of the Liver.

According to most authors on diseases of the liver, jaundice is a rather rare symptom in connection with hydatid cysts in the organ. This opinion is contested by M. Ortiz Coffigny, in his inaugural thesis (*Thèse de Paris*, 1881). He describes three forms of jaundice under such conditions: the first is temporary and due to congestion of the biliary passages; the second, of longer duration, is due to obstruction and inflammation of the canals, and the third is grave or pernicious jaundice. The most common form of icterus in hydatids of the organ is due to obstruction of the ductus choledochus. Jaundice may be of sudden origin or come on slowly. In the first case it is almost certainly a sign of rupture of the cyst into the biliary passages; coming on more slowly, it is almost always due to pressure on the larger canals by a cyst developed about the hilum of the organ.

Special Reports.

NO. VII.—HEART DISEASES.

(*Concluded from page* 109).

ACUTE FATTY DEGENERATION OF THE HEART.

Dr. Samuel West also presented to the same meeting of the Pathological Society (*Lancet*), the following unusual case: It was a specimen of acute fatty degeneration of the heart in a young man aged eighteen. Two months before admission to the hospital he had a mild attack of rheumatic fever, after which he suffered from malaise and slight pain. He got steadily worse and was admitted into the wards. The heart was enlarged, and there were mitral and aortic murmurs. After a week his feet swelled, then jaundice and hæmoptysis occurred, and death soon followed. At the autopsy old cicatrices in the lungs were found. The heart was remarkably yellow and minutely speckled with small, yellow spots, and was so fatty that the oil ran off the cut surface. There were small, recent vegetations on both mitral and aortic valves. The muscular fibres showed fatty degeneration, but no interstitial change. Such cases are not common. Those that have been recorded appear to fall into three groups. The commonest depend upon anæmia, usually chronic, but occasionally acute, such as that caused by repeated bleedings. Then we have the degenerative group, in connection with acute fevers and phosphorus poisoning. In the third group there has been previous inflammation of the muscle; thus, some cases of sudden death in rheumatic fever, with acute myocarditis, have been recorded. The specimen exhibited probably belonged to the third group. The question was asked whether such disease could exist without causing any symptoms except slight malaise, as it was a very

important medico legal point. Decomposition very rapidly gives the appearance of fatty degeneration to the heart. Mr. Doran always found it in the usual rough examination of hearts commonly met with at autopsies. The question was not answered.

INCOMPETENCE OF TRICUSPID VALVE.

Dr. Bedford Fenwick presented a specimen before the Pathological Society of London (*British Medical Journal*). He related the clinical phenomena noted during life, which consisted chiefly in a double cardiac murmur, œdema and marked cyanosis. The mitral orifice was much contracted, while the tricuspid was much dilated. He thought it an instance of secondary tricuspid incompetency. He could only find fifteen such cases so recorded as to be of any use for statistical purposes. He found that stenosis occurred more often in women, and considered this to be due to two causes. First, to the lesser strain on the heart in women, which allowed greater rest to the valves and more prolonged apposition, and secondly, to the fact that the valves are relatively larger in women.

CARDIAC MURMURS IN THE PUERPERAL STATE.

Dr. Angel Money communicated a paper to the Royal Medical and Chirurgical Society (*Lancet*) on this subject. The observations were made on 111 consecutive cases. Murmurs were heard in 84 cases, or about 75 per cent. The great majority of the murmurs were located over the right heart. There were two cases of undoubted structural disease. The patients who possessed a murmur for the most part did not suffer from symptoms referable to the heart. The time of the murmurs was invariably systolic. The murmurs are divided into three sorts. The first (resembling an ordinary endocardial murmur) was most numerous; was of blowing character, soft, usually low or medium pitched, fairly long and heard with almost every cardiac beat, and presented but little variation during the course of its existence. The number of these was 51; 36 were loudest over the tricuspid area, 8 over the mitral area, 6 over the pulmonary, and 1 over the aortic. By tricuspid area he means the fourth left interspace, just a little to left of left edge of sternum. The murmur was conducted to a variable extent. The duration of the murmur was variable. Most commonly the murmur was first heard a day or so after delivery. The most novel and interesting, the tricuspid murmur, is believed not to be due to tricuspid regurgitation. He can arrive at no definite conclusion as to the mode of production. The second kind (friction like) was almost absolutely non-conducted, was heard over a very small area, just above and to left of ensiform cartilage. The murmur seemed superficial, was high pitched and stiff in quality, and was not audible with every cardiac beat. This sort was heard twenty-nine times. The mechanism is probably exocardial friction. The third kind of murmur, the least numerous and the most capricious, was remarkable for its loudness, was very inconstant, *i. e.*, not heard with every cardiac beat, and was very transitory; its area of audition was remarkably limited, it was most frequently heard over one or other base of the heart; it was commonly associated with an excited condition of the heart and pyrexia or mental emotion. Besides pyrexia, excitement and anæmia, this murmur was sometimes associated with râles in the chest, and with a cough, but no sputa. The quality of the sound varied. In many cases it resembled the quality of the sound evolved when a piece of silk, tightly stretched, is scratched with the nail; or like the sound heard when pressure is made on the carotid, in anæmic cases. The murmur was in all cases heard when the breathing was stopped. This murmur was heard sixteen times. The mode of generation of these murmurs was regarded as very puzzling. All the murmurs of the second and third kinds, and the majority of the first kind, were temporary phenomena. Murmurs in the puerperal state are not (as a rule) indicative of cardiac disease. Dr. John Williams has verified these observations in a large number of cases. The murmurs were curious and remarkably frequent, being almost a physiological phenomena. Dr. Finlay said that a point of some interest was the effect which change of posture had upon these puerperal murmurs. He saw a case in which a soft systolic murmur was audible over the whole præcordia, and in addition, a loud, musical systolic murmur over the aortic cartilage, and the second right interspace and the adjacent part of the sternum. These murmurs become almost inappreciable when the patient turned to either side, and disappeared completely when she sat upright.

CONGENITAL CARDIAC DISEASE.

Dr. W. B. Hadden related to the Pathological Society of London (*Lancet*) the following case: The patient was a female child four months old. On admission to hospital the face was pale, the hands and lips livid, the chest expanded badly, respiration 66. Lung resonance in front impaired, but breathing vesicular. No cardiac murmur was heard. Improvement followed the next day. On the third day there was dullness over the left lung anteriorly, and scattered dull-

ness at both bases, with crepitation and rhonchi. Before death respiration was 96 and temp. 101. The heart weighed four ounces, average weight at this age being less than one ounce. Septum between ventricles imperfect above, admitting the whole of the middle of finger. The right ventricle was much hypertrophied, a quarter of an inch thick in some places, its cavity dilated. Musculi papillaries much hypertrophied, as was also the left ventricle. The foramen ovale and ductus arteriosus were practically closed. Pulmonary artery large and the aorta inversely small. It was considered worthy of note that the heart weighed nearly five times the normal amount.

ACUTE ENDOCARDITIS—PYREXIA—EMBOLISM—DEATH.

In the *Medical Times and Gazette*, Dr. H. Ashby reports two cases of endocarditis which he thinks take rank between the simple ordinary endocarditis and the malignant form already discussed. Clinically, the form to which he desires to call attention is accompanied by a systolic mitral murmur, angina-like pain in the præcordial region, pyrexia of an intermittent type, wasting, increasing weakness, the phenomena of inflammatory emboli, and more or less enlargement of the liver and spleen. The first case ran its course in about five months, having what was probably embolism of dorsal artery of foot and later splenic embolism. The second case was cut short by embolism of the left middle cerebral, softening of the arterial wall, aneurism, and finally hemorrhage and softening of the brain. The condition of both hearts was almost exactly similar. The roughened edges of the mitral valves, the numerous fibrinous, tag-like concretions attached, were present in both; also a similar condition of endocarditis extending into the left auricle and creeping up the left wall for an inch and a-half. It is interesting to note that the effects produced by embolism in these cases were not mechanical, alone, but the inflammatory processes set up were due to the nature of the emboli. The red, painful swelling on the dorsum of the foot, the lymph on the surface of the spleen, the aneurismal swelling of the middle cerebral, were silent witnesses to the inflammatory processes affecting the valves of the heart.

MUMPS, WITH ENDOCARDIAL MURMURS.

Dr. John Appleyard (*Lancet*) reports a case of mumps, in which a friction sound was audible over the right base of the heart, near the second rib cartilage. There was no increase of dullness over cardiac region. The parotid inflammation was transferred to the testis and the murmur continued. When desquamation commenced the patient was very weak, and a faint, blowing (systolic) murmur was audible over the pulmonary artery, not appreciably changed by pressure. When the patient recovered, the murmurs disappeared.

RUPTURE OF THE CORONARY ARTERY.

Dr. H. W. Lilly, of Fayetteville, S. C., reports a case of death from rupture of the coronary artery, close to its origin. The patient was a man 50 years of age, of large frame and healthy appearance. He was attacked with severe pain in the breast, and on auscultation, a confusion of sounds that took neither the form of defined râles nor of any of the usual auscultatory signs, was heard. The pulse was quick and intermittent every third beat, respiration labored and shallow, countenance anxious. The man soon became worse, with great dyspnœa and threatened syncope, and died suddenly four hours after he was first seen. The pericardium was found to contain blood clots and bloody serum. The aortic valves were studded with vegetations, and the neighboring part of the artery was atheromatous. The right coronary artery was mottled with small, yellowish-white, irregularly distributed, superficial patches. Just above the semilunar valves the degenerating process was more marked, and a rent was found in the vessel, one-sixth of an inch long, running parallel with its course.

The recent literature on heart disease is very meagre; all that has been written, of interest, during the past six months, has been embodied in this report.

CORRESPONDENCE.

A Discreditable Literary Act.

[We publish, without comment, the letter below, which we have translated from the German original, merely stating that the work was published by a New York house, *contrary* to the author's expressed wish.—ED. REPORTER.]

ED. MED. AND SURG. REPORTER:—

I apply to you, as the editor of a really independent medical journal, to permit me to print in it the following lines, which are certainly not without general interest.

I refer to a translation of my work, *Die Neben wirkungen der Arzneimittel* (The Accessory Action of Medicine), which has been made, directly against my will, by a New York physician.

While I was negotiating with a firm in America about a translation, Dr. Alexander, of New York city, asked my permission to translate it. I declined his request, stating the above reason.

Hence, I was justly astonished, when, recently, I received, through my publisher, a copy of my work, translated by Dr. Alexander, contrary to my expressed wish.

I regret that between Germany and the United States there is no treaty to protect the rights of authors, and I hope this example will aid in showing the importance of one. All the more unpleasant is it when such action is committed by a fellow physician; for certainly the ethics of the physician should be international, and not cease because an ocean separates its members.

Yours respectfully,

DR. L. LEWIN,

Docent in the Berlin University.

NEWS AND MISCELLANY.

Inoculation.

During the course of an address on "Preventive Medicine," delivered before the Tri-County Medical Society by the President, Dr. R. C. McEwen (*Med. Annals*), he paid the following tribute to the discoveries in inoculation of the present day:—

"But the possibilities of the future are unknown. Scientific truths that had their birth in days long past afford no subject for the cynic now, as we live in the enjoyment of benefits from their practical application. It was the growth of a century that developed the wonders of worlds in space and compelled the intelligent mind to accept the Copernican doctrine; yet its author was subjected to the anathemas of the theologian, and his published works incited the superstitious to curse him as heretical. The twitchings of the hind legs of the frog interested the scientist and afforded amusement to courtier and peasant, yet the electric spark encircles the world, and nations are cemented in community of thought and interest. *The future of inoculation* may excite a smile of incredulity, but the seed now sown may become the tree under whose protecting branches the nations to come may enjoy an immunity from disease, only foreshadowed, perhaps, in the present, but waiting the roll of years to become perfected truth, and be added as another blessing from the hand of science, ministering to the comforts and necessities of man."

The Cause of Malaria.

In connection with the National Board of Health, the health authorities of New York, Connecticut, Rhode Island and Massachusetts have undertaken a series of investigations to endeavor to determine the true nature of the malarial poison. The experiments of Klebs, Tommasi-Crudelli, and Sternberg, will be repeated. The laboratory work will be carried on by Dr. W. F. Whitney, of Boston. Physicians throughout the country are asked to coöperate in these investigations, by giving answers to the following questions:—

(1) Has malarial fever in any of its forms prevailed in your town or vicinity during the past year, or does it now prevail?

(2) If so, please state—

(*a*) The number of cases of which you are cognizant.

(*b*) At what season of the year the disease has prevailed.

(*c*) Whether the persons so affected reside near any pond, reservoir, or stream, and if so, how near and in what direction?

(*d*) How many of the persons included in answers to questions, *a*, *b*, and *c*, have had malarial fever in previous years, and how many have been exposed to malaria in other places?

(*e*) Can the disease in any case be traced to the use of drinking water from malarial districts?

(3) Has malarial fever been known in your vicinity in previous years?

(4) Did it exist the year previous to its appearance in your town in any town nearly adjacent. If so, please state where, and how far away?

(5) If malarial fever has ceased to prevail during this or any previous year, state any causes which may appear to you sufficient to explain this relief.

(6) What other diseases have been endemic or epidemic in the town at any time during the year.

Physicians in localities where malarial fever is prevalent need not fear to injure their neighborhood by answering these questions, since such information will not be published at present.

The Toner Medical Library.

Dr. Joseph Meredith Toner has given to the United States, for permanent preservation in the library of Congress, his entire collection of books, pamphlets and periodicals, between 20,000 and 25,000 volumes. This includes the most valuable collection of American medical publications to be found anywhere. Dr. Toner has devoted much time and money to the gathering of this library, and proposes to continue adding to it during his life, and to create a fund to still further increase it after his death. The gift has been accepted by Congress, with suitable provision for its care and preservation.

Items.

—Congress is still disgracefully wrangling over the remuneration of the physicians who attended the late President Garfield.

—A French newspaper reports the deaths of a mother and five children from eating poisonous fungi in mistake for mushrooms.

—Dr. T. Gaillard Thomas has accepted his former position of Clinical Professor of Diseases of Women, in the College of Physicians and Surgeons, New York.

—The important Chair of Clinical Medicine at Vienna—Skoda's chair—lately vacant through the death of Professor Duchek, has been offered to Professor Nothnagel, of Jena.

—Materialists sometimes quote the words of Kant, "Give me matter and I will explain the

formation of a world; but they omit his other words, "Give me matter only, and I cannot explain the formation of a caterpillar."

—Mr. Charles G. Francklyn, in whose seashore cottage President Garfield died, has just founded and endowed a sanitarium for poor children, at Elberon, in memory of his young daughter, Gladys Francklyn, who died recently in Paris.

—Dr. B. W. Richardson, nothing daunted by the work of resisting the drunkenness of the age, has just been presiding at Exeter Hall, over the foundation of a Society for the Suppression of Juvenile Smoking. We heartily wish the Society success.

—In Newcastle, England, a new kind of organization has been established, called the Invalid Loan Society, whose object is the lending of clothing, furniture and such other articles as will minister to the comfort of those who are both needy and sick.

—In Kent, England, a band of young men, it is said, have established a society for the "Protection of the Natural Form of Woman," and, according to one of the rules of the society, bind themselves, "by demonstration, argument and entreaty, to induce their sisters and all ladies who are injuring their bodies for the sake of fashion, to sever the remaining link which connects the present generation with barbarism." By another of the laws the members promise to live a life of protest against the fashions so prejudicial to health.

OBITUARY NOTICE.

GRIFFITH J. SCHOLL, M.D.

The subject of this sketch, Dr. Griffith J. Scholl, departed this life at his old homestead at Hecktown, this county, on Saturday, July 8th, at 7 P. M., at the advanced age of 82 years. Dr. Scholl was a son of Dr. Philip Scholl. He was born at Allentown, Lehigh county, on August 22d, 1800. During his childhood his parents removed to the State of New York, where he spent his younger days and received a liberal education. In after years he took up the study of medicine in the office of his brother, Dr. Henry Scholl, who practiced his profession in Lehigh county, and in due time graduated at the University of Pennsylvania. He practiced his profession in Lehigh and Northampton counties for a period of sixty years, and was a resident of this county over forty years. Dr. Scholl was a successful practitioner, and was more generally known throughout this county, by reason of his advanced age and long service in his profession, than any other member of the medical fraternity. He was blessed with a vigorous constitution and was seldom confined to his bed by illness. Dr. Scholl enjoyed more than a mere local reputation. His counsel was often sought by patients from a distance. In his manner he was genial; in his professional opinion he was discreet; not bigoted or prejudiced. In the sick-room he was calm and collected, and above all, he possessed a manner that gained the confidence of his patient. He was a close observer, a student throughout his life, and as his years advanced his enthusiasm did not diminish. He was honorable and upright in his dealings, kind and truthful to his patients, and always loyal to his profession and professional brethren, never taking part in the petty jealousies and bickerings which too often mar the career of professional men. For sixty years Dr. Scholl followed industriously, honestly, and I believe conscientiously, the calling of his choice, until, two years ago, he was stricken with paralysis, when decided inroads upon his remarkable physique became evident. From this period his health varied, but he continued to practice medicine until about six weeks ago, so that it may well be said he died in harness. On July 3d he had another attack of apoplexy, which ended in death. His sadly bereaved consort, aged 80, survives to mourn the loss of a good and kind husband, three sons and two daughters a kind and affectionate father.

His funeral took place at Hecktown on July 12th, attended by a very large gathering of professional friends and others from all parts of the county.

PHILOS.

Bath, Pa., July 12, 1882.

QUERIES AND REPLIES.

W. O. S., N. Y.—Dr. Hamilton prepares sponge for grafting by soaking it in a mineral acid, in order to dissolve out the spicules of lime and silica. He found that the network of keratode so obtained became filled with granulation tissue, and in time became practically a part of the patient's body.

MARRIAGES.

FOWLER—WAUGH.—On Tuesday, June 20th, 1882, in Cohocton, Steuben county, N. Y., in the Presbyterian manse, by Rev. John Waugh, the father of the bride, Thomas B. Fowler, M.D., and Ida Waugh.

FRITTS—WYNKOOP.—At the residence of the bride's parents, in Syracuse, N. Y., on Wednesday, June 14th, by the Rev. E. Van Slyke assisted by Rev. Charles W. Fritts, of Fishkill-on the-Hudson, Dr. Crawford Ellsworth Fritts, of Hudson, N. Y., and Emma Judson, only daughter of Jonathan G. Wynkoop.

GOODNO—HANSBURY.—June 27th, 1882, at the residence of the bride's parents, by the Rev. W. S. Goodno, of Asbury Park, N. J., Charles F. Goodno, M.D., and T. Addie, daughter of H. S. Hansbury, all of West Philadelphia.

GUY—PARRY.—On June 1st, at the home of the bride's mother, by Rev. S. C. Jennings, D.D., S. J. Guy, M.D, of Homeworth, Ohio, and Miss Jeannette Parry, of Allegheny County, Pa.

IREDELL—WILLIAMS.—At the residence of the bride's father, in Trenton, N. J., by Rev. J. R. Westwood, on Thursday, June 29th, 1882, Dr. Harvey Iredell, of New Brunswick, and Miss Emma Williams, of Trenton.

DEATHS.

ATWATER.—At Centre Harbor, N. H., July 13th, after a short illness, Dr. William Atwater, of this city.

BRUSH.—At Norwalk, Conn., July 8th, 1882, Francis V. Brush, M.D.

GREGORY.—At his residence, No. 189 East Seventy-first street, New York, on July 6th, 1882, Dr. Orson S. Gregory.

HOPPER.—At Hackensack, N. J., July 8th, Dr. H. A. Hopper in his fifty-eight year.

LEVIS.—On the 19th inst., Mary E. H., wife of Dr. R. J. Levis, of this city.

WADE.—In New York, Friday evening, June 23d, Dr. Charles H. Wade.

YARROW.—At 4 A.M., on the 17th inst., at his residence, Alloway, N. J., Thomas J. Yarrow, M.D.